

STARFIELD: THE LATEST INFO



PC GAMER



OVERWATCH 2

WORTHY SEQUEL
OR UPDATE IN
DISGUISE?

PCG INVESTIGATES

GOING PRO

CAN EXPENSIVE
GEAR REALLY HELP
YOU 'GIT GUD'?



WORLD EXCLUSIVE

DUNE

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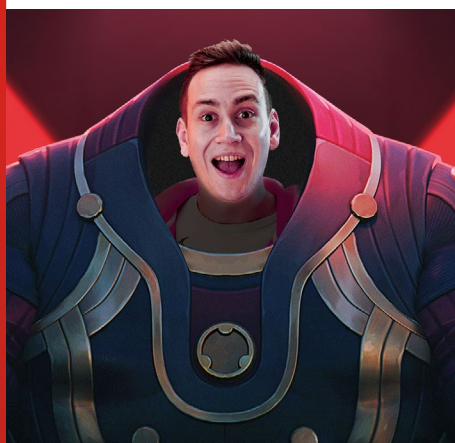
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“FIERCE SPACE POLITICS, GIANT WORMS, AND PSYCHIC DRUGS”

**ROBIN VALENTINE**Twitter
[@robinvalentine](https://twitter.com/robinvalentine)**This month**

Zipped himself up in a sleeping bag and declared himself God Emperor.

sci-fi – and, incidentally, the perfect battleground for a strategy videogame. We first found that out 30 years ago with *Dune II*, and now *Dune: Spice Wars* is here to prove it once again.

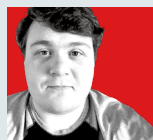
ROBIN VALENTINE
PRINT EDITORrobin.valentine@futurenet.com

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The PC Gamer team

**WES FENLON**Twitter
[@wesleyfenlon](https://twitter.com/wesleyfenlon)**This month**

Took Dune fandom to the next level by snorting cinnamon up his nose until he saw visions.

**MORGAN PARK**Twitter
[@MorganRPark](https://twitter.com/MorganRPark)**This month**

Investigated the difference between 6v6 and 5v5. Bless him, he struggles with numbers.

**IMOGEN MELLOR**Twitter
[@ImoMellor](https://twitter.com/ImoMellor)**This month**

Discovered that even time travellers have to deal with rich people messing everything up.

**CHRIS LIVINGSTON**Twitter
[@screen cuisine](https://twitter.com/screen cuisine)**This month**

Ran errands for a bunch of frogs. And yet he “doesn’t have time” to wash up his used mugs?!

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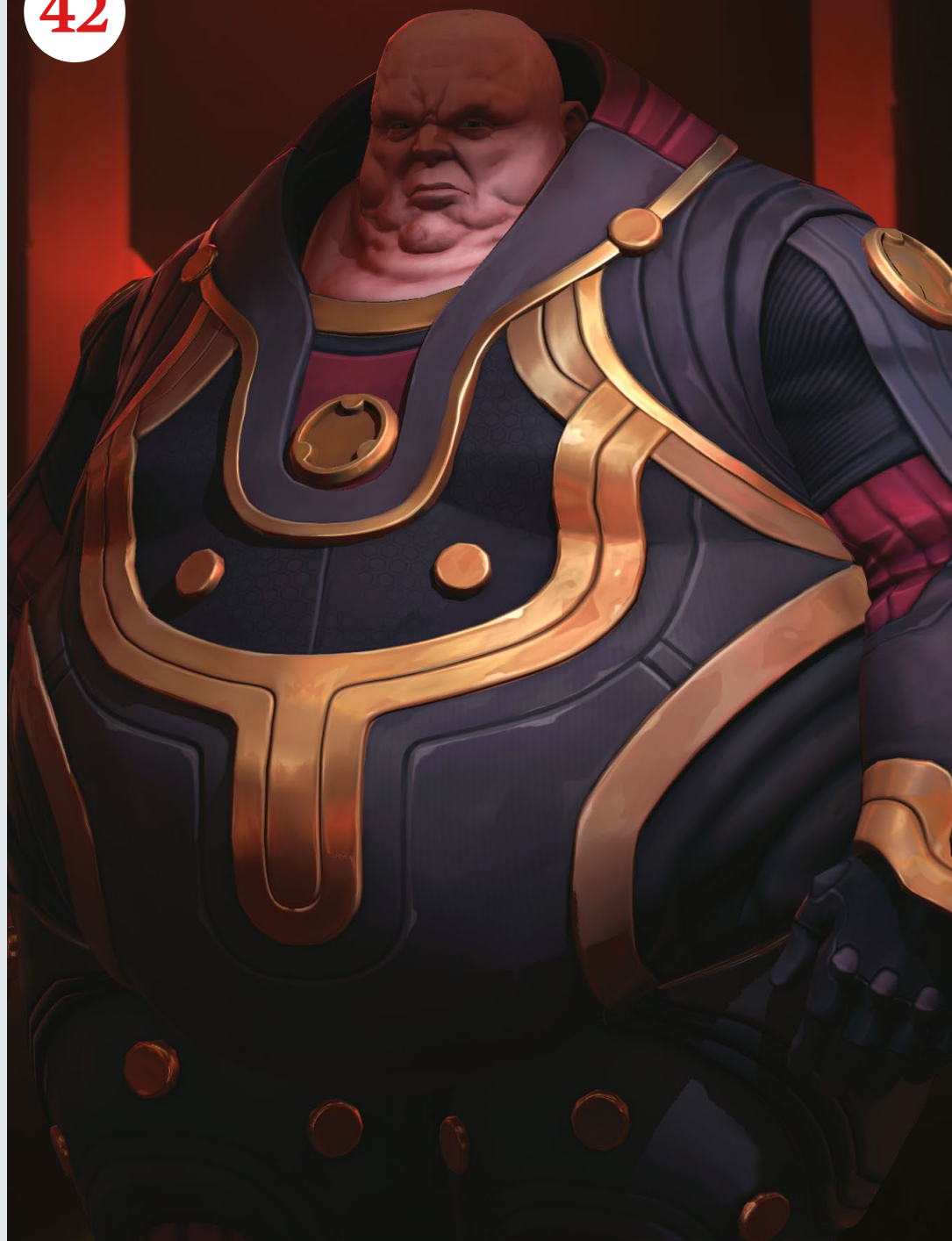
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DEVELOPMENT



IN THE STARS

Bethesda's "*Skyrim* in space" **STARFIELD** has been delayed to 2023

It's official: *Starfield* is not launching November 11 2022 as originally planned. It's instead now aiming at "the first half of 2023", according to an official Twitter update.

Bethesda repeatedly claimed that the game wouldn't be delayed, but the marketing has told a different story. With a focus on developer waffle over substantive reveals, the official videos have been light on concrete info. With only brief in-game clips shown, it's been hard to believe that the game was only months away.

Director Todd Howard has dubbed it "*Skyrim* in space", but he's

A big feature will be a new persuasion system. "As far as new systems in dialogue," says Howard, "I think it's definitely one of the most successful ones that we've had."

keen to emphasise that it aims to do more with character customisation than *Skyrim* did: "Some things we didn't do [in older games]: the backgrounds, the traits, defining your character, all of those stats... a lot of the things that older hardcore RPGs, something we used to do, doing those again in a new way."

"YOU CAN SIDE WITH THE PIRATES OR YOU CAN REPORT BACK TO YOUR SUPERIORS"

One of the examples Bethesda offers is how a character can interact with factions like the Crimson Fleet.

"The cool thing about the Crimson Fleet is, what if you're a good person, a good player, and you don't want to play as the bad guy?" says lead designer Emil Pagliarulo. "You can side with the pirates or you can report back to your superiors and be basically a space-cop kind of thing, so it lets you be a good person but still play with the bad guys."

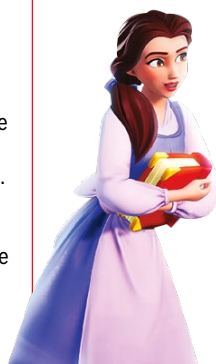
Starfield will also feature companions, and the first shown off is Vasco: the Constellation faction's expeditionary robot. Art of Vasco shows it fixing a ship's underside,

UNCUT GEMS

QUANTUM STORAGE



Researchers have found a way to grow a diamond large enough to store millions of SSDs worth of data inside it. A 5 centimetre diamond wafer could store up to 25 exabytes of data – that's 25,000,000 terabytes, or enough space to download every game on Steam over 6,000 times. ■ **JR**



DREAM BIG

DREAMLIGHT VALLEY



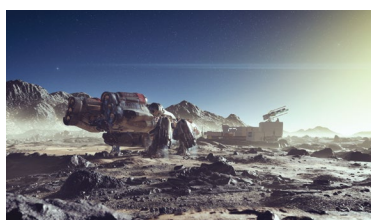
It might have a *Kingdom Hearts*-style premise, but *Disney Dreamlight Valley* is a very different proposition from the JRPG. It's a life-sim adventure full of Disney characters, who you can befriend while you build a Disneyfied neighbourhood. You can become gardening buddies with WALL-E! ■ **FB**

WHAT THE FOX

MOVE OVER ALYX



Gagnetar's *Alyx Replacement* mod for *Half-Life 2* swaps out Eli Vance's daughter for Krystal, the primary heroine of the *Star Fox* series. It first came out in 2017 but now, in a twist, the original Krystal voice actor Estelle Ellis has done "a complete rework of Alyx's lines" for the mod. ■ **AC**



while its strengths are described as traversing rough terrain and carrying a lot of stuff on extended journeys. The robot has weapons, but his primary role is being "peaceful" – so Vasco is going to be your space donkey.

STAR POWER

Starfield's lead artist Istvan Pely says the guiding principle for its look came when, "We coined the term 'NASA-Punk' to describe sci-fi that's a little more grounded and relatable. We wanted a very realistic take. You can draw a line from current-day space technology and extrapolate from there into the future so it's believable and relatable."

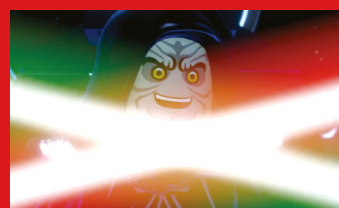
It all adds up to an exciting pitch, but honestly the thing we're hoping for most is just a clean launch. For all their splendor, Bethesda's games are typically a mess when they first release – it'd be nice to see the developer live up to the promise in its update of using the extra time to deliver "the best, most polished version" of the game.

"I like to say that *Starfield* has two 'step out' moments," says Todd Howard. He's referring to that kind of moment in *Oblivion* where, after the dingy and dark tutorial tunnel, you first set eyes on that vast and gorgeous world. It's going to be a little longer now before *Starfield* itself steps out – here's hoping it's worth the wait.

Rich Stanton

While Howard has compared the game to *Skyrim* in some ways, he also says "the mechanics of the world are entirely different".

Highs & Lows



HIGHS

Take-ya time

Ghostwire: Tokyo's director is interested in making a sequel.

MM-No

Final Fantasy XIV producer Yoshida recently asked that players in a new PvP mode stop saying "Nice job!" to opponents.

Lego May Cry

Lego Star Wars: The Skywalker Saga arrived with an unexpected quality: air-chains and infinite combos.

That sucks

Bethesda has also delayed Arkane's vampire co-op shooter *Redfall* to the first half of 2023.

You bet

Streamer Félix Lengyel aka xQc, admitted spaffing about \$2 million on gambling in April.

Deus Next?

Square Enix has sold *Tomb Raider*, *Deus Ex*, and three game studios for \$300 million. A bargain?

LOWS



The Spy

■ BUT WHO WATCHES THE SPY?

The thing they never tell you about espionage is just how much paperwork is involved. You're never just handed a watch-that-is-also-a-gun or a pen-that-can-hack-the-mainframe. There are forms to be filled, requests to be submitted and terrifying spreadsheets – monsters

constructed from formulae and checkboxes – that need to be logged. And while it's tempting to call this overkill, The Spy understands the need. Without the full weight of bureaucracy backing your options, you're just a regular person crouching in the bushes, watching what people are doing. Admin: it's what separates the professionals from the perverts.

Still, The Spy is sometimes jealous of those who get to operate without the need for such extensive documentation. Criminals, for instance. The mob doesn't need to fill a 12-page health and safety questionnaire before they can order a pair of concrete shoes. There's no analytics to track the number of people you've made sleep with the fishes. You don't have to go on a three day training seminar before you can take charge of a horse's head.

This nascent crime envy is why The Spy took notice of a new Kotaku report suggesting that a fourth *Mafia* game is on the way. Reportedly codenamed *Nero*, this new project – claimed to still be in early stages at

developer Hanger 13's Brighton office – is said to be a prequel to the existing *Mafia* trilogy. The plan, Kotaku says, is for it to be made in Unreal Engine 5 rather than the *Mafia III* engine that was used more recently for the *Mafia: Definitive Edition* remake.

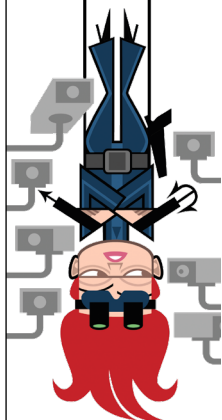
More than just a tease for a new game, though, Kotaku details turbulence at Hanger 13 – a studio that has reportedly been in a precarious position since the release of *Mafia III*. Despite an incredible opening hour, the 2016 open world adventure quickly devolved into a fairly tedious checklist of repetitive activities – a far cry from the more story-led experiences of its two predecessors. And following *Mafia III*'s release, Hanger 13 underwent two rounds of layoffs in 2017 and 2018.

According to Kotaku, the studio subsequently made multiple attempts to create a new series not tied to the *Mafia* name – and all were subsequently abandoned. The article mentions a *Destiny*-like co-op action game code-named *Volt* – which was quietly cancelled by Take-Two after a significant investment – as well as a loot-based ARPG that was also dropped before it was ever revealed. Another project, called *Rhapsody*, was said to be a spy game set in 1980s Berlin.

If the core idea sounds strong, a Kotaku expose from 2018 revealed issues with its wildly shifting scope. One of its proposed mechanics involved music – specifically a 'detective mode' that was triggered by listening to music. It's claimed that Hanger 13's management team decided that, actually, that should be the focus – changing it into a superhero game where music was a weapon. One example given was that, by listening to *Eye of the Tiger*, and pressing buttons in time to the music, you could summon an actual tiger to help you in battle. This, it was claimed, did not help the studio's morale.

You may think The Spy would decry this drastic shift away from espionage and towards rhythmic nonsense, but really it just proves what The Spy has been saying. Paperwork just isn't an exciting core mechanic for a videogame, and, if a developer isn't going to painstakingly replicate every form, it's really just fantasy anyway. Spy out. ■
The Spy

HANGER 13 UNDERWENT TWO ROUNDS OF LAYOFFS IN 2017 AND 2018



THE SPY
The Spy signs all forms in triplicate.

This month in... 2012



1 "Can *The Elder Scrolls Online* honour its roots as an MMORPG?" That was the question posed in our cover feature, as we discovered how Bethesda planned to transport the sandbox, freeform stylings of their flagship RPG series into the more formulaic structure of massively multiplayer gaming. It's debatable whether *TESO* actually succeeded, but it remains a popular genre staple today.

ISSUE
241, July 2012
ON THE COVER
The Elder Scrolls Online
IN THE CINEMAS
Men in Black 3



2 Richard Cobbett runs us through the best ways for getting old games to work. Despite his efforts, devs still spent the next decade remastering their old games.

3 "Another of the publisher's titles, *Sudden Strike*, was such a success that the CEO decided that *Divinity* should have alliteration," says Larian founder Sven Vicke in our feature on upcoming RPG *Divinity: Original Sin*. "He called it *Divine Divinity*. It sounds like a porn movie." Despite the *Divinity* series' inauspicious start, it would go on to produce one of the best RPGs of all time.

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PC GAMER

Special Report



Read our further hands-on impressions from Tyler C on p24.

BALANCING ACT

Blizzard hopes for big change by switching **OVERWATCH** from 6v6 to 5v5

It's not often that a multiplayer shooter decides to reinvent itself six years into its life. In the age of service games that never stop updating, Blizzard is taking a chance by revamping large parts of its competitive FPS and slapping a '2' on the end of it. *Overwatch 2* is not a sequel in the way we understand them. What I've seen of the multiplayer PvP beta so far feels more like an expansion.

Overwatch 2 will have more heroes, more maps and an intriguing PvE story mode, but Blizzard is also taking this opportunity to completely upend the meta it's spent six years building with one simple rule change – *Overwatch 2* is no longer a 6v6 game. One tank slot is gone and it's now 5v5.

Hearing lead hero designer Geoff Goodman explain the change to a virtual room of press, I got the sense that Blizzard wants *Overwatch 2* to be a faster, more immediately exciting competitive shooter.

"We had this big moment where we were gonna make this other game, essentially, and so there's really no better time to try experimenting with really big changes," Goodman said. Goodman and the team started by stripping back the entirety of *Overwatch* and reconsidering its fundamentals. "What are the engagement ranges? What are the team sizes, are we

happy with the way it is?" he said. "It was an exciting time, in a way, because a lot of us were around back when we started on [the first] *Overwatch*, and it was kind of that atmosphere again. It's like, 'Well, man, if everything's up in the air, let's treat this like anything could go, whatever we can try.'"

BACK 2 BASICS

The team didn't start at 5v5. Early tests stayed within the bounds of 6v6 and instead challenged the established 2-2-2 role format (two tanks, two DPS, two supports). They tried out a 4-1-1 setup that included one tank, one support and four DPS heroes. "That was maybe the worst experiment we did," Goodman said with a laugh. "You did not want to be a healer in that composition."

Eventually, though, the team started adding and subtracting players from their experiments and hit on something "really fun" with 5v5. Subtracting a tank, in theory, solves a flow problem that Goodman and his team had been thinking about for a long time. "One of the complaints that we heard a lot and agreed with was that *Overwatch* has the tendency to get bogged down with these defensive abilities," he said. "You know, you're playing against a double barrier comp like Orisa and Reinhardt or something, and you're just like, 'I never even get to shoot a player anymore.'"



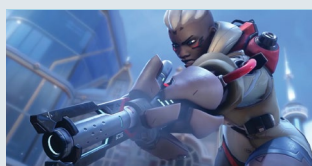
Role Swap

Overwatch's format was very different when it launched in 2016. At first, teams could consist of any combination of heroes. You could have duplicate heroes on a single team for a little while. A few years later, Blizzard switched to the 2-2-2 setup in place now: two tanks, two DPS, and two supports. With one tank removed in *Overwatch 2*, it's now 1-2-2.



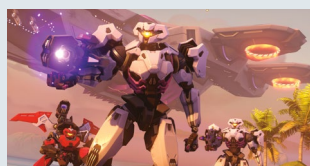
LEFT: New maps will include downtown New York and snow-covered Torono.

NEW ERA *What exactly will be in Overwatch 2?*



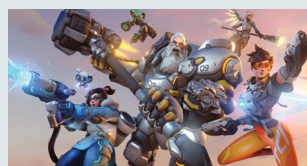
NEW HEROES

Overwatch 2's PvP beta only features one new hero at the moment (Sojourn), but more are planned for the final release.



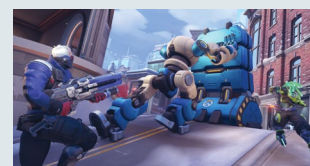
A CAMPAIGN

The part of *Overwatch 2* that returning players will actually have to pay for is the new PvE campaign.



5V5

Overwatch 2 moves away from the 6v6 format in favour of 5v5, dropping one Tank role from each team.



PUSH MODE

Push is a new mode that will replace the old 2CP objective maps. It's a bit like two concurrently moving payloads.

I can attest to that. That annoying double barrier comp isn't as common as it used to be, but it's true that *Overwatch* fights often consist of two confusing blobs of colourful characters huddling behind a barrier and shooting at each other. Taking away a single character on both teams doesn't sound like a monumental change (I was sceptical at first, too), but a single tank setup has some immediately noticeable effects. No option for a double shield comp is the most obvious. I've already noticed this encourages players to spread out more and use cover to avoid threats. There are also fewer large bodies on screen, so it's easier to focus on a single target.

THINK TANK

Once Blizzard decided 5v5 was the direction for *Overwatch 2*, it began the process of tweaking and reworking heroes to make sense on a rebalanced team. Unsurprisingly, that meant changing a lot of the game's eight tanks.

"We are definitely tweaking the tank role to be a bit more aggressive," Goodman said. The goal is for every Tank to feel "brawlier" and more capable of doing the job that they've had all along – escorting the team through chokeholds, absorbing the brunt of incoming damage and putting pressure enemies with close-to-mid-range attacks.

Orisa has seen the most dramatic rework, with a complete kit overhaul that ditches her deployable shield for a javelin that can skewer enemies or briefly absorb attacks. Reinhardt, too, is now better equipped to charge toward enemies and lob ranged Firestrike attacks into groups. Doomfist, a melee-focused DPS hero, is switching

roles to a tank who specialises in disrupting the enemy backline. Basically, 'hunker down' tanks are out and 'lets push forward' tanks are in.

After hearing about the tendency for shields to bog down *Overwatch*, I posed a question to Goodman: is the game better without shields?

"To broadly answer the question, no, I don't think [*Overwatch*] is better without shields," he said. "But clearly it's worse when there are too many shields."

Goodman believes it's not a question of if there should be shields in the meta, but how they're used. He explained that Reinhardt, for example, is an interesting addition to the *Overwatch* meta because he creates a threatening one-directional area. He's powerful, but "the second you're able to flank the team or surround them in some way, the shield becomes a lot worse very quick".

Whether or not Blizzard's sweeping balancing changes will be well-received in the long run is yet to be seen, but after a few days in the beta, I'm having a good time. What makes me nervous is what's getting left behind – abilities, maps, and team configurations that will disappear when *Overwatch 2* overwrites *Overwatch*.

I'm sad I'll never again get to do the Reinhardt/Zarya combo my friend and I have practiced hundreds of times, or play in iconic *Overwatch* locations like Temple of Anubis when the Assault game mode is swapped for Push. *Overwatch* is entering a new era, and not everything can come with it. ■

Morgan Park

ENCOURAGES PLAYERS TO SPREAD OUT MORE AND USE NATURAL COVER

Positive Influence

INSPIRATIONS AND CONNECTIONS IN GAMES

GRANDMA TURISMO

How streetracer **SZROT** became a celebration of Eastern European cultures

For Hjalte Tagmose and Gustaw Mackay, the frustration started with mislabelled food in *The Witcher*. “The pierogi is called a dumpling,” says Tagmose. “It’s like calling sushi a rice sandwich,” adds Mackay. Now, these two Polonophiles are determined to counter the Americanisation of games by creating, in their words “the least American game possible”.

The result is *Szrot*. “It’s a Polish word,” says Mackay. “You have to know how to do the rolling, trilling R. It can mean junkyard, or it can also just refer to an old, beat-up car.”

That’s fitting, since *Szrot* is a driving game about steering jalopies around post-Soviet cities. One in which even the countdown to a race is written in Croatian and translated in subtitles – as if in the opening credits of a foreign language film. It’s reflective of the Danish developers’ fondness for Eastern European cinema, which began with the cult Russian neo-noir *Brat*, before extending to more esoteric movies from Poland.

The idiosyncrasies don’t end there. The masterstroke was to render *Szrot* as if it were a PS1 game. “Communist blocks are kind of low-poly already,” Mackay says. “There’s not a lot of smooth shapes.” Pairing a nostalgic aesthetic with the brutalist buildings of Beograd has struck a chord on Twitter, where early *Szrot* footage has been watched by tens of thousands. “This could come off a bit pompous, but it’s kind of like French impressionism,” Mackay says. “All the detail’s not there, so you have to fill in some holes yourself.”

That capacity for low detail to set the mind racing worked wonders for *Resident Evil* and *Silent Hill* – but it’s

not horror that Mackay is looking to evoke so much as mystique. “The first game I ever played was *Riven*,” he says. “Totally alien, the atmosphere was just out of this world. The mystique of old games is unmatched today.”

There’s a practical benefit, too. *Szrot*’s uncomplicated visuals lend a clarity that helps when avoiding collision in busy streets. The team has even created lower-poly models for incidental traffic – so that opponents’ cars stand out amid the noise. “We don’t need to have a giant marker or anything,” Tagmose says.

CRAP-TASTIC

While the team hasn’t been afraid to make use of post-PS1 advancements in physics, there’s a recognisable early PlayStation bounciness to its clunky Fiats. “The driving experience is about feeling the spongy suspension and the holes in the road,” Tagmose says.

Gran Turismo 2 was an important influence – though the cars in *Szrot* are more likely to benefit from simple repairs than performance tuning. “We took some inspiration from *GTA IV*, because the feel is very shitty,” Mackay says. “It’s like a crappy car, not the supercars of *GTA V*. That’s kind of the feeling we want to invoke.”

As a player, you’ll take these broken-down hunks of rust to street races throughout the former Soviet Union, competing for glory and new rides. And if you need extra funds to fix your steering or upgrade your engine, you can hustle on the side. “In between the main storyline you’ll be in a semi-open place – right now Beograd, in the future more places – and can do smaller missions,” Tagmose says.

At that slightly slower pace, the hope is there’ll be more time to soak in the culture. And to take on daft tasks, like driving a drunk friend home, or whisking an old lady to the grocery store in two minutes flat – premises inspired by the winningly goofy backstories of *Ridge Racer Type 4*.

You might argue that this vision of Eastern Europe, created with help from Google Maps by two Danes, risks becoming a kind of cultural voyeurism – made by Westerners, for Westerners. But whenever the *Szrot* team posts a new video, a Beograd resident will reply, spotting their own neighbourhood in the fuzzy, wonky footage.

“It’s cool for people to see the places they live,” Mackay says. “They never got a PS1 game that looked like this. Our theory on why this style works so well is that it’s an oxymoron. This game is not possible. It’s supposed to look like the ’90s, but it could never be released in the ’90s, when only the US and Japan made games. That makes it cooler. What if?” ■

Jeremy Peel

ROAD BLOC

Other games that drive the European way



JALOPY

Take a single car – heavily based on the infamous East German Trabant – on a road trip from Berlin to Istanbul, fixing it up as you go.



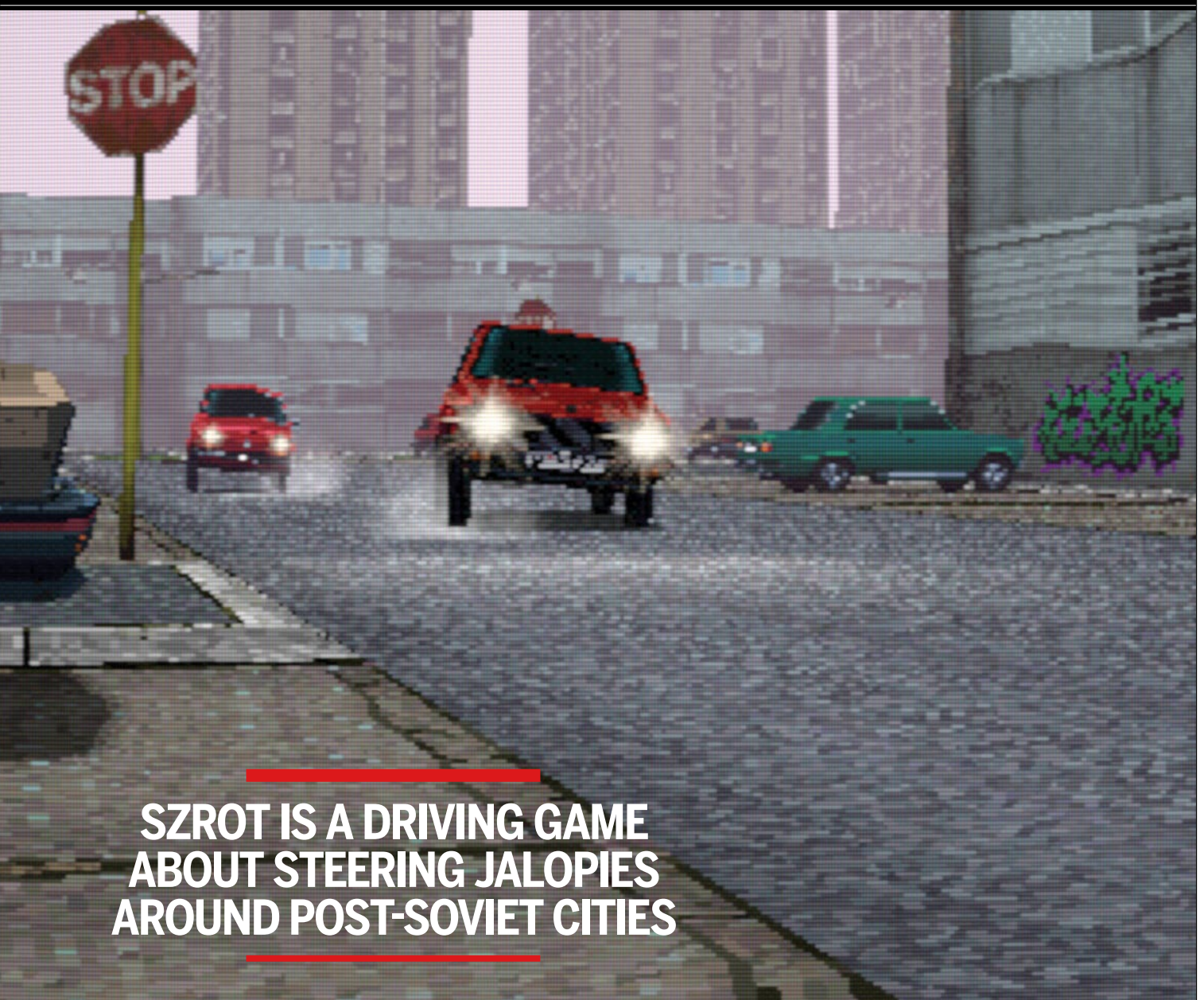
BEWARE

A wild escape from murderous pursuers, loosely based on creator Ondřej Švadlena’s real-life escape from Czechoslovakia.



OMSI 2

This legendary and uncompromising simulator is the only place you can ride Berlin’s bus routes both before and after the wall came down.



SZROT IS A DRIVING GAME ABOUT STEERING JALOPIES AROUND POST-SOVIET CITIES



The tram is the safest way to get to work, they said.



ABOVE: Beograd – or Belgrave – was once the capital of Yugoslavia.

LEFT: In its less grounded moments, *Szrot* recalls the car chase absurdity of *Driver*.





DNA Tracing

GAMING'S LINEAGES EXPLORED

**“THE WAY HE PRESENTED
IT TO ME WAS THAT HE
WAS PUTTING TOGETHER
THE 1927 YANKEES”**

INSIDE BASEBALL

How **38 STUDIOS'** failed MMO gave us *Kingdoms of Amalur: Reckoning*

"Must have been born under a lucky star, this one," mutters the gnome pushing the cart that carries your dead body. His voice is leaden with irony. Your luck extends only to the fact that your corpse is in one piece. A fat lot of good that'll do you on your way to the incinerator.

It's an opening most reminiscent of *Planescape: Torment*, the classic RPG that begins in similarly macabre circumstances. But it also evokes *The Elder Scrolls* – namely the census taker who processes your entry to Morrowind, and mentions that you were born under a certain constellation. In that game, it's a detail that contributes to a sense that you're favoured by the gods, and fated for great things. Here, in *Kingdoms of Amalur: Reckoning*, it's a winking reference that acknowledges the Bethesda pedigree of lead designer Ken Rolston, as well as the fact that things will be different this time.

Rather than fated, you are fateless. Returned from the dead by gnomish experiments, you are the only living individual in Amalur whose story in the great tapestry of destiny has already concluded. That makes you both an exciting and dangerous figure: able to lay down your own path, and knock the fates of others off course.

KINGDOM COME

Behind this premise, and the fiction of Amalur, was the American fantasy author RA Salvatore. The Drizzt creator directed his writers to research creation and destruction myths, and to find patterns in folklore. He circulated short stories about key characters around the office at 38 Studios, where Amalur was first conceived as the backstory of an MMO. But that MMO would never come out, and Amalur wouldn't live beyond its first reckoning.

Fittingly, given all this talk of constellations, 38 Studios was fuelled by star power. It was founded by baseball legend Curt Schilling, a rare MMO nerd with the means to get his dream project up and running – having earned more than \$114 million over his two decades in the sport.

It was Schilling who recruited Todd McFarlane, a friend and comic book artist known for Spider-Man and Spawn, as art director, and who called Salvatore out of the blue.

"The way he presented it to me was that he was putting together the 1927 Yankees, and he wanted me in his batting order," Salvatore told Gamasutra in 2007. "When our names came on board, then the real talent came in. He's a pretty persuasive guy, and his batting average is pretty good on the people he pulled in. He got most of the people he wanted."

EverQuest II lead designer Travis McGeathy joined up, and with the acquisition of Big Huge Games, so did Rolston. The intention was to use Big Huge Games' engine to power 38 Studios' MMO – and in the meantime, put out a single-player RPG set in the same world.

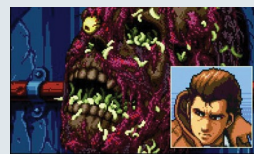
The latter became *Reckoning*, which launched with EA's backing in 2012. There was plenty there for *Elder Scrolls* fans to latch onto – from the tumbler-twisting lockpick minigame, to the NPCs who could be tapped for training in specific skills, to the guards who gave you the choice between prison, fine, and resisting arrest when they caught you stealing.

Dialogue harked back to Rolston's work on *Oblivion*, driven by keywords that allowed you to ask a village drunk's opinion on a distant war if you so desired. And cave networks tended to end with a cliff, meaning they could only be explored in one direction – an old *Elder*



RECK YOURSELF

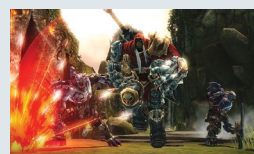
The worst remake titles of all time



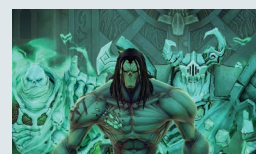
SNATCHER CD-ROMANTIC
Hideo Kojima was committing crimes of nomenclature long before Die-Hardman came along.



RED FACTION GUERRILLA RE-MARS-TERED
The same studio that remastered *Reckoning* did this one too.



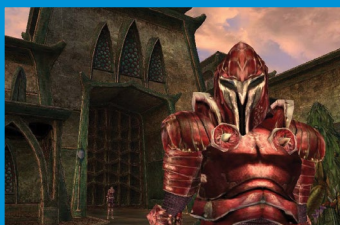
DARKSIDERS WARMASTERED EDITION
Fans suggest the improved resolution make up for the pun.



DARKSIDERS II DEATHINITIVE EDITION
Please, you have to stop. This is an intervention.

RIGHT: The game received a recent remaster, with the dreadful name *Kingdoms of Amalur: Re-Reckoning*.

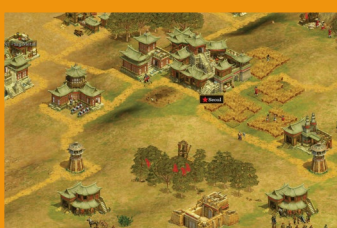




MORROWIND
Ken Rolston was lead designer.



OBLIVION
Bethesda's breakout hit.



RISE OF NATIONS
An RTS from Brian Reynolds and former Civ devs.



CATAN
An Xbox version of the beloved German board game.



KINGDOMS OF AMALUR: RECKONING
Chunky, fun RPG.



DOMINATIONS
Reynolds-led mobile strategy.



THE TWO TOWERS
Console hack 'n' slash.



DEMON STONE
RA Salvatore wrote this D&D story.



PROJECT COPERNICUS
The MMO that never was.

KINGDOM COME

How the Copernicus team came together

KEY

- 38 Studios
- Big Huge Games
- Bethesda Game Studios
- Stormfront Studios

» *Scrolls* trick, used to ensure that a dungeon had a clear narrative shape, a beginning and an end.

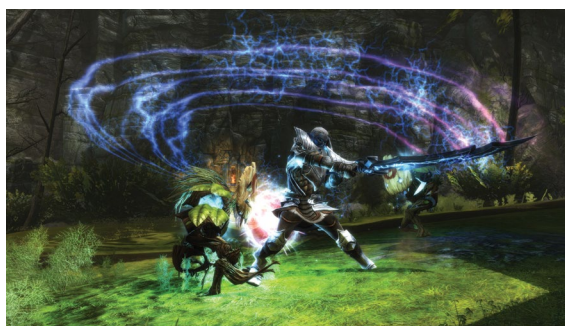
FINAL FANTASY

Between Rolston and Salvatore, it's perhaps no surprise that *Reckoning* struck a very earnest, Tolkienesque tone. As much as its campaign challenged social division and encouraged you to speak out against it – another Salvatore staple – its fiction was also comfortably old-fashioned. Found books bore titles like *The Words of Solen Reingar* as Chronicled by Parthalan, while standing stones in the wild delivered lore poems over strummed lyre – a slightly corny fantasy backdrop to an unusual premise.

Yet the *Reckoning* team pulled no punches in its aim to punt the RPG genre even further into the mainstream. Its combat hinged on combo moves learned as you level up, and offered convincing heft. It's hard not to like a game that asks you to collect gold by smashing vases with a hammer the size of a giant's croquet mallet. That appealing immediacy extended to satisfying, cut-and-dry questing, too – with a mission's end rarely far from where it began.

What's strangest about *Reckoning* in retrospect are its MMO trappings – its chunky, brightly coloured world and the question marks that hover above the heads of NPCs. They're a reminder that this was to be the overture to *Project Copernicus*, the MMO that 38 Studios was making. But fate, or financial woe, intervened.

The US state of Rhode Island had offered the company a \$75 million loan guarantee in exchange for 450 local jobs over three years. But in May 2012, governor Lincoln Chafee told reporters his goal was simply “keeping 38 Studios solvent”. That ominous public announcement



LEFT: This is a rare RPG that's better played with a gamepad.

killed any hope of outside investment in a game which had become wildly expensive. The following day employees discovered they hadn't been paid for the month. A little over a week later, the studio was finished.

Just last year, former employees of 38 Studios were finally seeing some money in lieu of their final paycheques – the result of almost a decade of litigation, and a fraction of what they were owed. Schilling himself was “tapped out” after putting \$50 million of his personal fortune into the company. In recent years he's become a right-wing talking head, losing work over transphobic memes. He publicly supported the pro-Trump mob which attacked the United States Capitol. It's

difficult to imagine Schilling leading a revival of the studio named after his jersey number.

Reckoning, however, has enjoyed a second life – revived by THQ Nordic in 2020, and re-released with a brand new expansion. Must have been born under a lucky star. ■

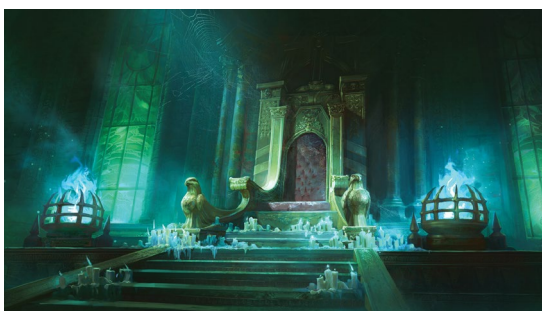
Jeremy Peel

WHAT'S STRANGEST ABOUT RECKONING IN RETROSPECT ARE ITS MMO TRAPPINGS



"As far as the eye could see, you could go," said Schilling of his MMO.

1 month



DIABLO IMMORTAL

RELEASE June 2 | **DEVELOPER** Blizzard

No, this isn't *Diablo IV* – this is the mobile game that was announced a couple of BlizzCons ago, and weirdly is getting a PC version day-and-date.



THE QUARRY

RELEASE June 10 | **DEVELOPER** Supermassive Games

A spiritual successor to *Until Dawn* that sticks close to the same horror tropes, with a new gang of horny teens being terrorised by mysterious killers in the woods.



STARSHIP TROOPERS – TERRAN COMMAND

RELEASE June 16 | **DEVELOPER** The Aristocrats

Is an RTS game a suitable vehicle for the original film's brand of biting satire? We're not sure – but it looks like either way it'll be fun to blast hordes of bugs to bits.

3 months



TWO POINT CAMPUS

RELEASE August 9 | **DEVELOPER** Two Point Studios

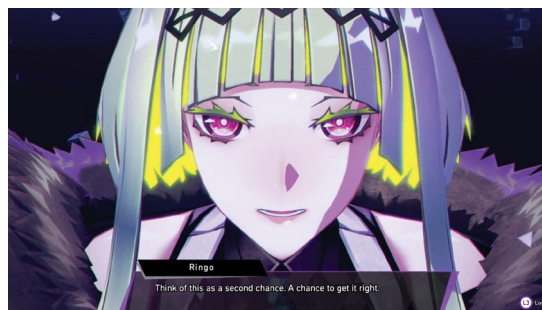
Another Bullfrog-aping, light-hearted management sim from the creators of *Two Point Hospital*, this time putting you in charge of a surreal college.



SAINTS ROW

RELEASE August 23 | **DEVELOPER** Volition

After recent entries escalated to alien invasions, virtual worlds, and a trip to actual Hell, this reboot is bringing things back down to earth with a new cast of trendy criminal hipsters.

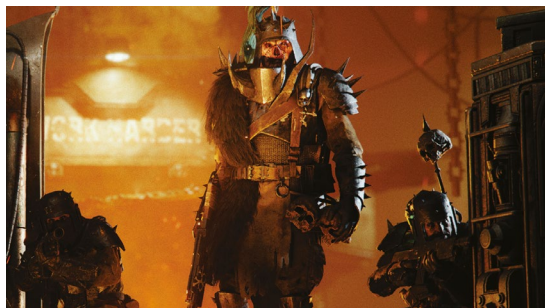


SOUL HACKERS 2

RELEASE August 26 | **DEVELOPER** Atlus

Another spin-off of the popular *Shin Megami Tensei* series. For those not in the know, that means it's a monster-summoning JRPG that's part of the same family as the *Persona* games.

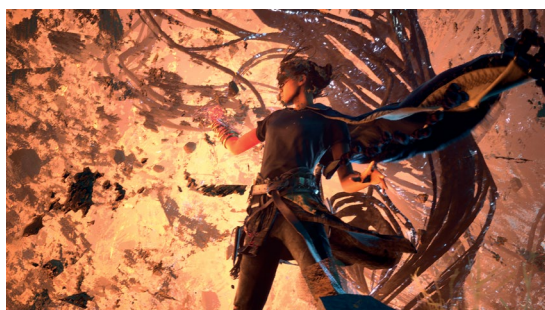
6 months



WARHAMMER 40,000: DARKTIDE

RELEASE September 13 | **DEVELOPER** Fatshark

A follow-up to modern co-op classic *Vermintide 2* that moves the action to the grim darkness of the far future, where you'll battle an insidious, disease-worshipping cult.



FORSPOKEN

RELEASE October 11 | **DEVELOPER** Luminous Productions

A modern day New Yorker is transported to a fantasy realm, where her new magical powers come with the small catch that she has save the world.



GOTHAM KNIGHTS

RELEASE October 25 | **DEVELOPER** Warner Bros Games Montreal

A co-op game in the style of the *Arkham* series, but starring all of Batman's friends instead of the man himself, and with a generous sprinkling of RPG elements.

12 months+



SUICIDE SQUAD: KILL THE JUSTICE LEAGUE

RELEASE 2023 | **DEVELOPER** Rocksteady Studios

The long-awaited follow-up to the *Batman: Arkham* series, starring Harley Quinn and other super-villains forced to fight evil versions of Superman, The Flash, and others.



OVERWATCH 2

RELEASE TBC | **DEVELOPER** Blizzard

The PvP and PvE portions of this part-sequel, part-expansion have been split up into two drops, so that the PvP content can arrive sooner – though we still don't know when yet.



TACTICAL BREACH WIZARDS

RELEASE TBC | **DEVELOPER** Suspicious Developments

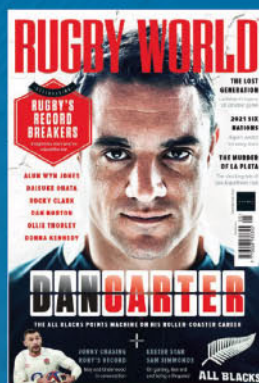
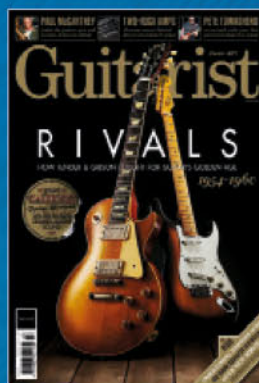
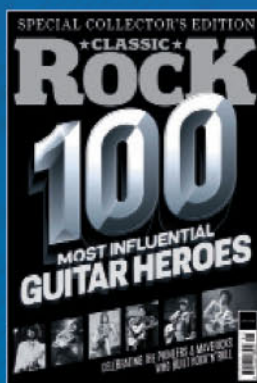
Arriving simply "When it's done", this turn-based strategy game from the creator of *Gunpoint* sees you breaching and clearing with both tactical SWAT gear and magical spells.

UPDATE

TOTAL WAR: WARHAMMER III

The *Immortal Empires* patch, which will allow you to combine content from all three games in the series, is now not expected until late summer or early autumn.





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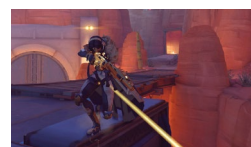
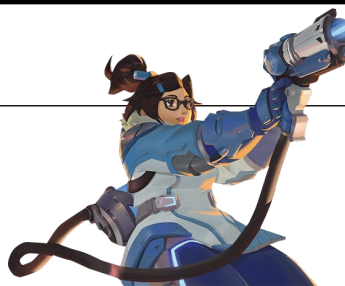


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PREVIEW





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OVERWATCH 2

Blizzard's new entry doesn't quite earn sequel status

The toughest battle I fought while playing *Overwatch 2* was trying to figure out why it's a sequel. Blizzard's follow up to its 2016 team-based hero shooter doesn't make substantial enough changes to the game that you can still play today. It's too familiar, and that only heightens the current game's issues.

If you, like me, have played *Overwatch* since its inception, you can track the progress of the game by memory alone. What started as an ambitious, goofy shooter for people who don't play traditional FPS games like *Call of Duty* and *Battlefield* has slowly turned into a game that keeps dialling up its lethality to mirror its competitors. So much has changed since 2016, and a lot of it comes from how *Overwatch* skewed the idea of what FPS games could be. *Valorant* and *Apex Legends* wouldn't exist if *Overwatch* hadn't roused the shooter audience with a colourful cast of characters with unique abilities and weapons.

Overwatch 2 chooses to ignore the revolutionary spirit of its predecessor and looks to other games to try to revitalise where it left off. Needless to say, I disagree with Morgan (see p12) on how much Blizzard is actually shaking up here – for me, this is a game that mistakes imitation with innovation. *Overwatch* used to be the most diverse game, the FPS for all different types of players, the example that everyone followed. Now, it's a game stuck trying to please its most hardcore

players and hoping new ones will simply follow along.

NEW RULES

Since its launch, *Overwatch* steadily made changes to bolster its growing competitive scene, bleeding its casual playerbase. Before the rise of the Overwatch League, matches could consist of any number of heroes in different combinations. Now, each team is locked to a specific number of tanks, damage dealers, and supports. *Overwatch 2*, as part of the next step in this trend, reduces the 6v6 game to 5v5, shaving off a tank from each team. In Blizzard's words, 5v5 is the solution to *Overwatch*'s frequent issues with metas controlled by the power of support and tank heroes in the game. With one less tank, the game's highly-mobile team fights will loosen up and allow for more individual impact, or 'carry potential'.

In the *Overwatch 2* beta, 5v5 isn't as clean of a solution as Blizzard might want it to be. Although it frees up the restrictions on the amount of damage many heroes can put out, it removes a lot of the ways healing and tank mitigation would keep firefights from getting too chaotic. Now, team fights erupt as you search for flank routes and opening eliminations. A Tracer can zip behind a support, take them out, and snowball that into a win by herself while her team fights elsewhere. But on the flipside, a solo Reinhardt can do the same if he charges into several low-health characters and starts swinging. Team fights are won not by an interlocked team, but by the first hero that finds an opening instead. In the original game, this is common, but held back by a second tank that could help control the fight and deny attackers, but in *Overwatch 2*, fights swing back and forth as both teams try to find uncontested positions.

Overwatch 2's hectic fighting is clear in its new Push mode. In Push, you and your team race toward a robot located in the middle of a S-curve map and try to push it to one side, further than the other team is trying to do the opposite way.

Unlike maps where you escort a payload one direction or try to capture and hold a singular point, Push yanks teams back and forth over the same chunk of the map. Not only do you not get

PLAYED IT

OVERWATCH 2 CHOOSES TO IGNORE THE REVOLUTIONARY SPIRIT OF ITS PREDECESSOR



➤ to see the totality of Blizzard's beautiful art direction in its new Rome, Toronto and New York City maps, the number of flank routes is so high that the identity of them disappears. Hunker down strategies that work on the hard chokepoints of a Payload map are less effective – you're unlikely to find success setting your team up on high ground and forcing your opponents to find a way around a bullet-spewing Bastion. It's not uncommon for team fights to not be team fights at all and, instead, be groups of two or three skirmishing in their own parts of the map.

The shift to 5v5 and the Push mode, at least in their current state, deteriorate the team play that was always so essential to the original *Overwatch*. While it allows for more immediately rewarding plays, it's merely a fleeting influence in a match. When everyone, across all of its once-distinct roles, are chasing kills in largely the same ways, the originality of its roster of 33 heroes starts to dissolve.

NEXT SLIDE

Sojourn, *Overwatch 2*'s first new hero in a long time, is a fragment of the hero design that once defined the game. She's a pilot from when *Overwatch*, the fictional organisation, was at its height. She's an African-Canadian woman who's been behind the scenes assisting characters by commanding them on the battlefield and whisking them away as their pilot.

It's the kind of heroism that many of *Overwatch*'s cast have at their core. Like Mercy, story-wise Sojourn is someone that is most adept at supporting her combat-oriented allies. It's puzzling then that they've decided to arm her with a massive railgun and an AOE energy bomb. Even if it's somewhat justified in her short biography, angling Sojourn as a damage character in the first place speaks to the direction of the game mechanically more than it does narratively. The game already has 16 other damage heroes; there's no reason that she couldn't have been a support or even a tank. Blizzard has promised that more heroes will be added in *Overwatch 2*, but kicking off a sequel by not addressing its glaring role imbalance, after years of fans criticising it, is telling about the types of players Blizzard values.

SOJOURN REQUIRES THE TACTICAL THINKING THAT OVERWATCH EXCELS AT

Sojourn's kit is very similar to long-range heroes like Widowmaker, Soldier: 76, and Ashe. You rotate around the map, pelt exposed enemies with her projectile fire, and then line up an alternative fire shot to delete them from the fight. If a fast-paced flanker like Tracer or Genji gets in your face, you can drop the AOE Disruptor Shot to drain their health and then use Sojourn's best ability, Power Slide, to slip away. It's the only compelling ability she has because using it feels like you're briefly playing *Apex Legends*, dashing into a high jump that rewards mobility over stationary shooting.

When playing against reworked heroes like Doomfist and Orisa, Sojourn requires the tactical thinking that *Overwatch* excels at. Doomfist, who is now a tank, can easily close the distance by launching a charged Rocket Punch her way or using his long-range Seismic Slam. Orisa, who is almost a new hero in her own right, can rush toward you with a spinning javelin that sucks up all of your bullets and can even send you flying backward with a javelin toss. As Sojourn, you can predict these tank abilities and save your Power Slide for when they get close, firing on them as you escape. Unlike other games, *Overwatch 2* still has moments where careful observation and decision-making will prevail over pure aim. These are the kind of hero interactions that *Overwatch* should be about, but when you zoom out and look at the increasingly rapid pace of the game, it happens so often that it loses its significance over the course of a match.

HOPEFUL FUTURE

The tragedy of *Overwatch 2* is that the parts that made it great are still in there, beneath a new game that can't decide whether it wants to be a hardcore FPS or the game it was at its height in 2018. The beta tries to be both by adding new toys to what is the same sandbox that the most skilled players have been unhappy in for the last few years.

More heroes and balance changes, particularly to the survivability of support, could shift the game back into a slower, methodical direction that fuelled the popularity of the original game – it could even find some compromise between high-skill and casual play. To do that, Blizzard will have to decide what kind of sequel it wants to be, and sync up the game's six years of design into something that earns the title *Overwatch 2*. Without that, it may fail to please anyone.

Tyler Colp



While tank barriers still exist, many of them have been removed.



ABOVE: Heroes like Sombra and Mei have been made much more lethal.

LEFT: Orisa's redesign turns her into a brawl-focused tank.

PREVIEW

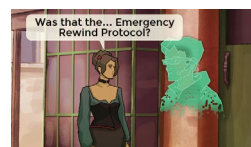
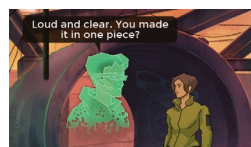
Old Skies



ABOVE: What's time travel without a little existentialism?

RIGHT: Rules are meant to be broken, but only on occasion.





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In-houseLINK
wadjeteyegames.com

OLD SKIES

Keeping the time-travelling rich out of temporal trouble

Time travel is tricky. It's never as easy as popping back, saying hi to Napoleon Bonaparte, and going home, is it? Sticky situations are inevitable, and that's as true as ever in upcoming point-and-click adventure *Old Skies*, which sees you working as a temporal agent looking after rich patrons as they mess with crucial timelines.

"I did a game jam about three years ago, when I was having a lot of trouble coming up with our next game idea," says Wadjet Eye Game's Dave Gilbert. The studio's most recently released project, *Unavowed*, was a real stand out of the point-and-click genre, telling a story of demonic possession and urban fantasy on the streets of New York. But that makes it something of a tough act to follow. "I entered a jam anonymously as a way to remove that burden. I created this game about a time traveller, and it was very short, but I enjoyed it. I enjoyed working on it and I liked the character, so I decided to expand it and turn it into a full game."

The result is *Old Skies*. It puts you in the boots of Fia Quinn, a time agent for the ChronoZen agency. Capitalism has reached time travel and, for a pretty penny, travellers can delve into moments of history or the future, either because they have unfinished business, or just want to observe a particular moment in time. Your job is to babysit them.

But the focus is as much on Quinn herself as it is the temporal ramifications

of her clients' actions. "The timeline constantly changes around her," says Gilbert. "I considered, what would that do to your brain? What kind of person would you be as a result? And so she's kind of a little misanthropic and nihilistic because literally nothing matters. She can meet someone, and they could disappear from existence the next day. Part of her arc over the course of all these missions is becoming someone who cares. Finding something she cares about and what she's willing to do to preserve it."

JUST IN TIME

The missions Fia will go on vary massively. Just some of the examples of the times you'll visit include the Gilded Age, the Prohibition era, and even the World Trade Center on the eve of September 11, 2001.

While there was a time when sudden death was common in point-and-click adventures, these days they tend to be much more forgiving. But *Old Skies* has a unique approach to that philosophy. "It's sort of a tradition in point-and-click games that you can't die," explains Gilbert. "I decided to lean into that where you can die, but she's a time traveller. So she has this mechanism that rewinds her history by five minutes or so. Fia can go through with the sequence again but she keeps the memory of everything that she did before."

This will be the focus of many of the game's puzzles. For example, I got to see a scenario where Fia needed to get into a locked safe. Allying with a particular character to get them to open it for you reveals the last two digits as 42 – but once they've done it, they grab a gun and turn on you, killing you. That sends you back in time, but now you know one third of the combination. You can then try other paths to finding the other two. It's a pretty simple example, but it's easy to see the mind-bending potential.

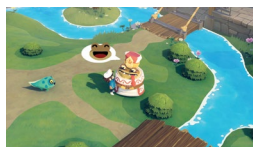
So when is *Old Skies* set for release? Well Gilbert says that development is moving quickly and it should be about another year before launch. Even with the very small slice I saw, it looked pretty wonderful. With charming voice over, smooth animations, and clever humour, it's got me wishing I could travel forward 12 months and play it.

Imogen Mellor

THE FOCUS IS AS MUCH ON QUINN HERSELF AS IT IS THE TEMPORAL RAMIFICATIONS



Time on Frog Island



NEED TO KNOW

RELEASE
2022DEVELOPER
Half Past YellowPUBLISHER
Merge GamesLINK
mergegames.com

TIME ON FROG ISLAND

Explore a colourful island and trade items with lovely frogs

Time on Frog Island was originally called *Trading Time*, and I can see why. I'm shipwrecked on an island, and the only way to fix my boat is to help out some giant frogs. Give a frog something it wants, it'll give me something back. It's all about trading up.

What those frogs want, and what they'll give me for it, is often a puzzle. No one speaks in words on Frog Island, only in pictures. The pictures can be simple, an identifiable object shown in a word bubble. Or it can be a little trickier. A frog asking for a sunflower is easy to understand but another shows me a picture of a mug, then a snowflake, then points at the local pub. Clearly he wants a cold beverage, but I'm just a tiny sea captain – how can I make him a drink, and what will he give me for it?

And so I go exploring, trying to figure out what everyone wants and how to get it for them. When I find an object, I can pick it up and run around holding it over my head. It is, frankly, adorable, running around the island on my little legs, picking stuff up and trying to make a frog happy with it. Even if no one wants the item I've found, it's still lots of fun sprinting around with it, whether it's a flower, or a fruit, or an angrily buzzing beehive.

Not every frog I help directly leads to fixing my ship. One frog handed me a giant love letter (I knew it was a love letter because little hearts floated above it) and I had to figure out who to deliver it to. I knew it was for a green frog, but there are no

shortage of green frogs on Frog Island. When I got the letter to the correct frog, I was sent back with a reply letter. The letter storyline had nothing to do with fixing my ship, but it made two frogs very happy, and seeing happy frogs makes me happy.

Frog Island is a big place, too, with lots of areas to explore, from beaches to forests to mountains with snow-covered peaks. There are puzzles to solve as well, items I need to carry not to a frog, but to a particular place to make something happen. Objects can also change depending on where you bring them, or the weather, or other factors. There are also a few timed challenges that had me racing around frantically, trying to get where I needed to be before time ran out and figuring out shortcuts and ways to travel more quickly.

HOPPY DAYS

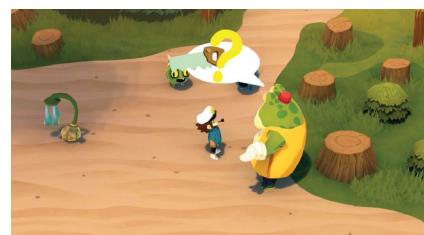
Sorry if I'm being vague about most of this, but discovering these puzzles and figuring out what sorts of puzzles they even are is part of the fun. Just like the frogs themselves, the game doesn't really tell you what you should be doing. It's up to you to find out by experimenting, and that's been so rewarding that I don't want to ruin it for anyone else. It's a game I find myself thinking about even when I'm not playing it.

"Well, what if I brought that item... to that place... maybe that would..." Then I rush back to my PC to try it out.

There are all sorts of enjoyable details in the scenery, in the frog's homes and their personal habits and personalities, and there are even yapping dogs in the form of tadpoles that will chase after you then run away when you try to chase them back. And late in the evening when my sea captain begins to yawn, I set up a fire at a campsite and sleep, each night learning a bit more about my own past and what brought me to the island in the first place.

Frankly, I'm not sure I actually do want to fix my ship and leave this cute island filled with lovely, friendly frogs. Repairing my broken rudder and replacing my sail are not all that high on my priority list at the moment. There are still puzzles to solve and mysteries to figure out and frogs that need help getting happy. And I'm happy to help them do it.

Christopher Livingston



Farmer Frog has a pest problem, so I'm off to mend his scarecrows.

IT'S A GAME I FIND MYSELF THINKING ABOUT EVEN WHEN I'M NOT PLAYING IT



ABOVE: Every frog house is adorable in its own way.

LEFT: The local barkeep needs some help. With something.





ABOVE: Make it look 20% more like a Gillette Mach 3 Turbo and we're nearly there.

RIGHT: This is what Christian Horner sees when he closes his eyes in bed each night.

Home H Help WORK IN PROGRESS - CONTENT AND EVENT TITLES NOT FINAL Continue

Prepare for upcoming races, manage your cars and drivers, and see your current standing in the championships.

4th ▼

ORACLE Red Bull RACING

Board confidence: Medium

Season Objective: 1st

Long-Term Objective: Constructors' Champion

Board

Teams	Drivers	
1 Ferrari		60
2 Mercedes		34
3 Alpine		26
4 Red Bull		25
5 Haas		24
6 AlphaTauri		16
7 Alfa Romeo		11
8 McLaren		8
9 Aston Martin		0
10 Williams		0

Standings

3rd ↔

Max Verstappen

Car 1

10th ▲

Sergio Pérez

Car 2

Upcoming Events

IN 1 DAY

- Car Part Manufacturing Complete
Chassis RB22-1 Manufacturing Complete

IN 3 DAYS

- Facility Upgrade Complete
Upgrade Complete

IN 6 DAYS

- Car Part Manufacturing Complete
Underfloor RB22-1 Manufacturing Complete
- Facility Upgrade Complete
Upgrade Complete

IN 1 WEEK

- Race Weekend
Albert Park Circuit, Melbourne

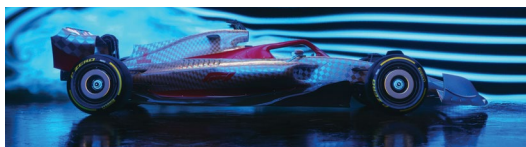
Race Weekend Preparation

Time Until Race: 7 days

Race: 3 / 22

Australian Grand Prix in 7 days \$38,436,726 1 Apr, 2022

Home Inbox Calendar Circuits Race Cars Drivers Staff Facilities Board Finances Standings Settings



NEED TO KNOW

RELEASE
2022

DEVELOPER
Frontier Developments

PUBLISHER
In-house

LINK
f1manager.com

F1 MANAGER 2022

Frontier steers clear of politicking in its licensed team principal sim

First things first: no, you can't go storming off to race control to argue your case in *F1 Manager 2022*. This isn't quite the sport as it is, but the sport as it might be – races and championships in Frontier's debut licensed title are decided strategically, not politically. So how does that play out?

Newer fans might be wondering what a team principal even does, if not berating Michael Masi in very public, televised radio communications or insulting their contemporaries at other teams. The answer, as *F1 Manager 2022* comprehensively demonstrates, is: a lot.

You're in charge of both the car's development, and the team's. You're assigning people to work on a new front wing, but also managing the facilities that those front wing designers work within. If you don't have a state of the art wind tunnel to test your theoretical designs in, you're probably not getting many purple sectors.

That level of control splits the game structurally into two distinct components. The first is a set of menus covering all aspects of the team itself day to day, from R&D to sponsor agreements, staff assignments to emails. The other is TV-style event coverage with a strategic layer for planning and monitoring tyre stints and radio comms between you and the drivers, which allow you to control their pace and react to emerging situations like safety cars and weather changes. There's a fully 3D race engine

here, but it doesn't go supersoft-to-supersoft with Codemasters' gorgeous *F1 2021* for outright fidelity. It scales down the lighting complexity and poly counts, and doesn't feature anything like the same realistic AI. But it looks convincing as TV-style coverage, bolstered by the Sky Sports commentary team chipping in at key moments and, in my personal favourite touch, race radio between the drivers and their engineers when you give them an instruction.

ALL F1

During the racing at Albert Park shown to PC Gamer in an offline gameplay demo, the two Ferraris of Leclerc and Sainz wrestled to work their way through Perez in P2 and then use the free track in front of them to chip away Verstappen's lead. It was immediately clear how evident your commands are in each driver's actions. There's a nice wide gamut of pace and AI decision-making between the different pace levels you can assign to drivers.

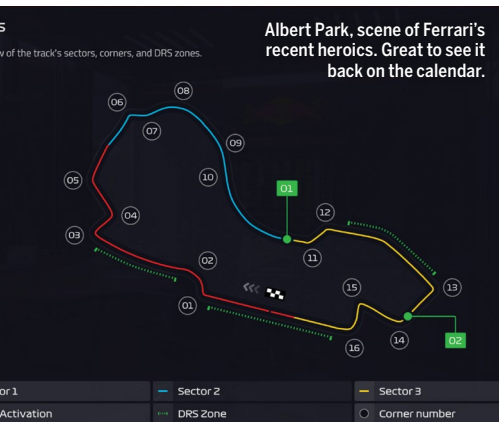
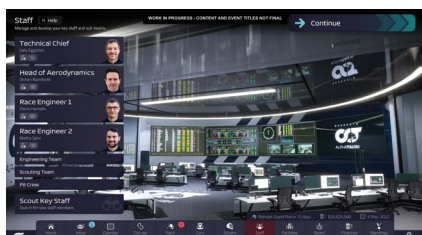
This being a management game, in the end it all comes down to resources. There are two chiefly important ones here:

FIRST LOOK

money and tyre life. It takes vast sums to keep any F1 operation ticking over, so securing lucrative sponsorship contracts and meeting board performance targets to secure higher funding levels is vital. In the shorter term, being kind to tyres and effectively managing their wear keeps your pace high across the full race and minimises pit stops, earning back a chunk of time on other cars who might have the pace advantage on paper.

That proposition probably won't be bringing in the F1-agnostic players in their droves, but it's truly exciting to have a studio as experienced as Frontier at the helm of this one. Just like *Football Manager*, it'll only get dangerously absorbing once you're a few seasons in, and we've yet to see how regulation changes, silly season driver moves, and the like change the complexion of the sport over time. We'll have to reserve judgment until that point, but at this early stage it's encouraging just to see that the minute details of tyre deg and front wing airflow are really at the heart of being a good virtual team principal.

Phil Iwaniuk



BOLSTERED BY THE SKY SPORTS COMMENTARY TEAM CHIPPING IN AT KEY MOMENTS

Oaken



ABOVE: Manipulating the colour of the board is a key tactic.

RIGHT: For practised tacticians, an advanced difficulty setting.





NEED TO KNOW

EXPET TO PAY
£16

DEVELOPER
Laki Studios

PUBLISHER
Goblinz Publishing

LINK
goblinzstudio.com

OAKEN

A small, sweet, and smart slice of tactical puzzling

In the words of competitive baking show judges everywhere: if you're going to go for something simple, you have to execute it perfectly. With its small levels, tight scope, and visual polish, *Oaken* is – or is on its way to be – that idealised Victoria sponge of tactical roguelikes.

Oaken is a simple game. You play your units out over a hexagonal grid, with each taking one action and moving one tile per turn. They can attack – and counterattack – any unit in their handily highlighted frontal arc, and placing units, casting spells, and using skills all burns a turn-limited resource. That's it: that's the game. OK, there's a little more to it than that, but it's all supplemental to these core fundamentals.

Across three acts, and that familiar roguelike branching route map, *Oaken* teaches you how to think about playing it. It keeps a strong focus on satisfying short-term tactical thinking, while keeping long-term decisions quietly on the backburner, and strips out a lot of the frustration of death-by-randomisation.

A strong, simple focus shouldn't be mistaken for being overly easy, though. In the first act, for instance, each level is a race against time. After a certain number of rounds, poisonous fog will fill the zone: game over. Carelessly aggressive play will only sacrifice your units, but being too precious will let enemies overwhelm you until that fog cloud comes.

ALL BARK

You start with a small deck and can only play each card once before it becomes 'unstable'. Playing that card again will exhaust it either permanently or until the end of the act, depending on your difficulty setting. There aren't opportunities to add new cards to your deck outside of fights, so it all ties together into an emphasis on precise, smart play. Your health resets in each level, so each one is about solving it correctly, not compensating for past mistakes.

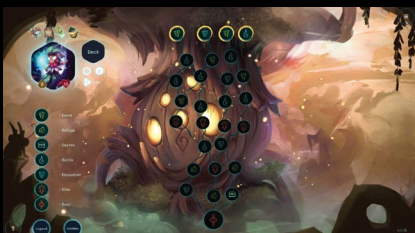
This balance isn't perfect, and I have a lot of early game false starts. Your build is really defined by your first trinket – those are boons rewarded by bosses and elites. Before then, standard fights can be quite swingy in terms of difficulty, and some optional objectives (which reward you with the Lumi Dust used to upgrade cards) logistically impossible. Once I'd found any kind of build, though, progress was down to my own good or bad decisions.

The Early Access version of *Oaken* has all three acts of the game playable, one Hero, and four Guardians, which all come with their own card and trinket pools. It's a playable game from start to finish, and bugs were mostly fairly minor – I found it fairly easy to accidentally 'break' level transitions (like by checking my deck when offered a trinket), but in all but one case, reloading my save fixed the problem without any loss of progress. The current plan is to add another Hero and another world map, as well as iron out any balance issues, in the next five to seven months.

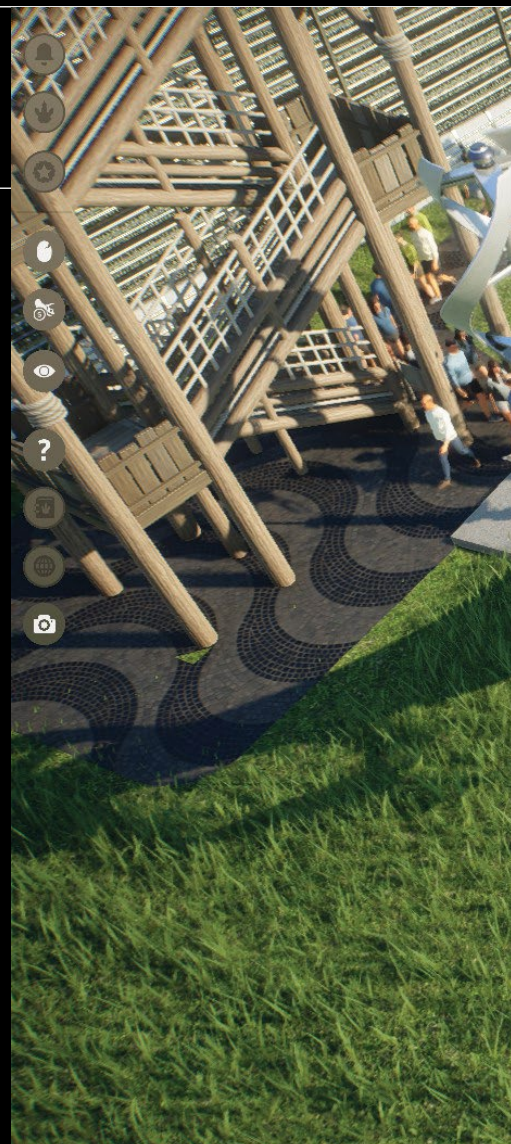
I wonder about that scope and timeline – but mostly because what's out now is already good. I don't know that it needs massively expanding on so much as refining. There are elements that could be improved, like the tiny text and the fact that there's no visual indicator of when a unit has used up its movement, but I can see the ingredients in *Oaken* for a tactics game I could pour hours into and enjoy. Its puzzle-like approach to level design. The sense of progression through a build. Synergising upgrades. Maybe it needs more time in the oven before it's that perfect cake, but I'm forgiving of *Oaken*'s faults because I think it'll all turn out in the end.

Ruth Cassidy

THE EARLY ACCESS VERSION OF OAKEN HAS ALL THREE ACTS OF THE GAME PLAYABLE



Prehistoric Kingdom



NEED TO KNOW

EXPET TO PAY
£23.80

DEVELOPER
Blue Meridian

PUBLISHER
Crytivo

LINK
prehistorickingdom.com

PREHISTORIC KINGDOM

Spare no expense on your zoo for the extinct



What's better than running your own zoo? Running a dinosaur zoo, of course. *Prehistoric Kingdom* tasks you with researching fossils that you can then use to resurrect extinct creatures. You'll need to manage their enclosures, making sure they have enough food, entertainment, and foliage, and then there are those demanding guests to think about.

Upon entering my park, The Before Times, you're immediately greeted with the toilets and a place to get a quick snack, before moving on to an exhibition and your first look at a big ol' dino: Camarasaurus. This long-necked fella likes a warm climate, a good amount of foliage nearby, and, apparently, spinning wildly on the spot. Richard, my new giant pal, got stuck on various trees, bushes, and shelters and began revolving. Maybe dinosaurs like chasing their own tails as much as dogs do?

Prehistoric Kingdom is still in Early Access, so bugs are to be expected. Likewise the tutorial is currently limited, though it does enough to get you started with the help of a Nige Thornberry-like instructor. I wasn't able to make Richard and his wife, Ina, completely happy in their enclosure, as I couldn't access more detailed exhibit information, but as development continues more features like this will appear.

Alongside researching species and bringing creatures to life, you'll need to consider energy management and visitor happiness. You can create modular

groups of solar panels and wind turbines to cover an area, generating power for lights, stores and more. Don't be like me and choose a map that has fewer hours of sunlight, because those solar panels won't charge and everything becomes expensive and chaotic real fast.

A SIGHT FOR SAUR EYES

Where *Prehistoric Kingdom* really shines is the range of little details you can add to your park. Want to place every plant and bush along your paths? No problem! Keen to create a lake with little floating flowers? Go ahead. Do you fancy lining the way to your exhibits with average looking streetlights or eye-catching floor orbs? You can even add letters to exhibit floors and walls if you want to spell out subliminal messages for your guests.

When placing park facilities, you have the option to place prefabs or modular units then customise their look and, eventually, what they sell. You can also rename them – alongside your dinosaur pals – to make your playthrough a bit more personal. You could name your park 'We Spared No Expense!' and design visitor areas furnished with stylish dark woods, or make everything look like a giant bathroom by having tiles everywhere. But just because you could, doesn't mean mean you shouldn't stop to think if you should...

In the build I played, the animal escape mechanics weren't finished yet. I stopped Richard mid-spin session and dropped him next to the path and instead of going on a rampage, he had a wee lie down, like a cat. I then placed him on the path, secretly hoping he would crush a visitor or at the very least make them run off screaming, but they just walked under him, seemingly unperturbed by a giant reptile. In this universe, humans and dinosaurs can coexist, it seems.

When more features are added, such as adjusting pricing for tickets and other customer amenities or enclosure management. The game has the potential to offer real competition to games like *Zoo Tycoon* and *Jurassic World Evolution* – especially the latter which, though slick, failed to make dinosaur keeping as exciting as it should be. Here's hoping *Prehistoric Kingdom*'s devs find a way.

Lauren Aitken

PLAYED IT

YOU'LL NEED TO CONSIDER ENERGY MANAGEMENT AND VISITOR HAPPINESS





ABOVE: Richard enjoys a wind turbine with his human pals.

LEFT: There's a ridiculous amount of customisation already in the game.



The Iron Oath



ABOVE: Bandage your injuries, or risk them worsening later on.

RIGHT: The camera zooms in for critical hits.





NEED TO KNOW

EXPET TO PAY
£15

DEVELOPER
Curious Panda Games

PUBLISHER
Humble Games

LINK
theironoath.com

THE IRON OATH

Mercenary sim meets dungeon crawler in this slick tactical RPG

You can hardly move for mercenary companies these days. Parked outside every bandit camp are bands of blades for hire, all bickering over who gets to claim the bounty. *The Iron Oath* is the latest merc game, and you won't be surprised to learn it offers turn-based tactics in a medieval fantasy world.

But where it differs from, for example, *Battle Brothers*, is in its less gritty world, and its focus on a set narrative as you seek to avenge a devastating betrayal. There's a lengthy prologue that leaves the company in ruins and sets them off on their retribution mission, although you can ignore this main quest and go tramping off across the world whenever you like.

The story is concise and well told, adapting as your mercenaries meet untimely ends. Playing on the medium difficulty, I had buried all my original soldiers by the time I finished the prologue. The resulting text narration made a point of commenting on the losses, while a later event invited me to perform a burial. I expended precious time on the funeral, because the game was treating these expendable mercs as actual characters – and, consequently, so was I.

The flip side of this narrative focus is that *The Iron Oath* is limited as a sandbox game. Where similar games procedurally generate their worlds, or offer a suite of starting options, here you're deposited in a fixed landscape with no way to tailor the world of Caelum to your liking.

To be fair, there is plenty of stuff going on in the background. Little icons by each town tell you which factors are affecting them, including the presence of bandits or monsters, or environmental effects like dust storms. These might sound dramatic, but mainly they decide the types of jobs on offer. If there's undead in the region, there will be more jobs asking you to hunt them down, for example.

THE IRON PRICE

When combat breaks out, it's handled swiftly and gracefully, in the tried and tested turn-based tactics manner. You can take just four of your company into fights, on smallish hex maps with a smallish number of enemies, which really gets you into the heat of battle quickly.

There's light and heavy cover, but there are also spike pits and holes, and sigils that trigger magical effects when stepped on. Rarely do your abilities just cause damage to your opponent; you're laying a fire trap with your pyrolancer, then using your pugilist to push the enemy into it.

It's not just one-off battles, however. Your mercs are more than happy to descend into monster-filled dungeons packed with obstacles and branching pathways. The closest comparison is *Darkest Dungeon*, as you hop from node to node while managing dwindling resources, but – at least in this Early Access version – the quest rewards are hardly worth the effort.

I found dungeons a tense, satisfying experience – the first couple of times. After, I would tend to focus on the shorter jobs. Jobs that wouldn't leave my mercs in the infirmary – or the grave.

The biggest issue at the moment is content. Oh, there are stacks of towns to visit and piles of dungeons to clear out, but not enough varied art assets to make any feel unique. I'm interested to see how *The Iron Oath* will develop over the coming months, as compared to many Early Access games it has launched in a remarkably solid state. The story is reactive and the combat satisfying, even with the small number of classes currently available. More of pretty much everything is coming, according to the roadmap, but this is already an engrossing and hugely promising tactical RPG.

Tom Sykes

PLAYED IT

WHEN COMBAT BREAKS OUT, IT'S HANDLED SWIFTLY AND GRACEFULLY



You'll need to utilise the terrain, particularly on harder difficulties.

Turbo Overkill



NEED TO KNOW

EXPET TO PAY
£15.50

DEVELOPER
Trigger Happy Interactive

PUBLISHER
Apogee Entertainment

LINK
bit.ly/3rNePcX

TURBO OVERKILL

A chainsaw for a leg, you say?
Okay, I'm in.

To kill things, shoot them until they die. How strange that something so brutal should appear so utterly banal. It's an excellent tip, however, for navigating *Turbo Overkill's* dark, cyberpunk world, and we're glad the game chose to give it to us as almost our first interaction.

Turbo Overkill's devs have seen *Blade Runner*. Possibly more than once. They've also played *Bayonetta*, *MadWorld*, *Syndicate* (the good one), *System Shock*, *Apex Legends*, and *Doom*. The game mashes these all together with absolute glee, the grin on the faces of the devs evident with every corner you turn.

The setting is Paradise City, where the grass is anything but green and the girls are quite likely to shoot you. The 'you' in question is Johnny Turbo, a cross between *Cyberpunk's* V and a *Syndicate* agent, with a chainsaw for a leg. Despite this apparent disability he's able to move as if speed skating in any direction, making the edges of platforms as dangerous as the fireball-shooting bad guys.

In addition to his pair of pistols, Turbo is armed with his lumberjack leg, which he can use to slide at groups of enemies, and a dash that can cross gaps and dodge incoming fire. Naturally, you pick up shotguns and grenade launchers and dual-wielded machine-guns as the game progresses, each with alternate fire modes and the ability to be upgraded at cabinets. There's also a minigun that

doubles as a flamethrower, just in case you find that sort of thing interesting.

Ammo lays around the place, as do health potions and entire suits of armour. Red barrels explode, you shouldn't walk in the green gunk, and every enemy has been thinking about shooting you from the moment of its birth. We've all played games like this before, and *Turbo Overkill* cements its retro credentials with a pixelated, gritty aesthetic that actually works well when applied to the neon cyberpunk city, with post-processing effects bringing in plenty of rain and bloom lighting. It also means framerates and resolutions can be high – the flat level geometry behind the low-res textures is the price we have to pay.

Of course, your city doesn't end up looking like *Paradise* does without a dark secret that needs to be rooted out, and *Turbo Overkill* leans back on the old 'rogue AI' routine. The entire population appears to have developed a bad attitude, alongside a rash of cybernetic implants, since Syn took over, its giant purple eye being possibly our favourite evil computer look since *Potato GLaDOS*.

PLAYED
IT

THAT OLD SAW

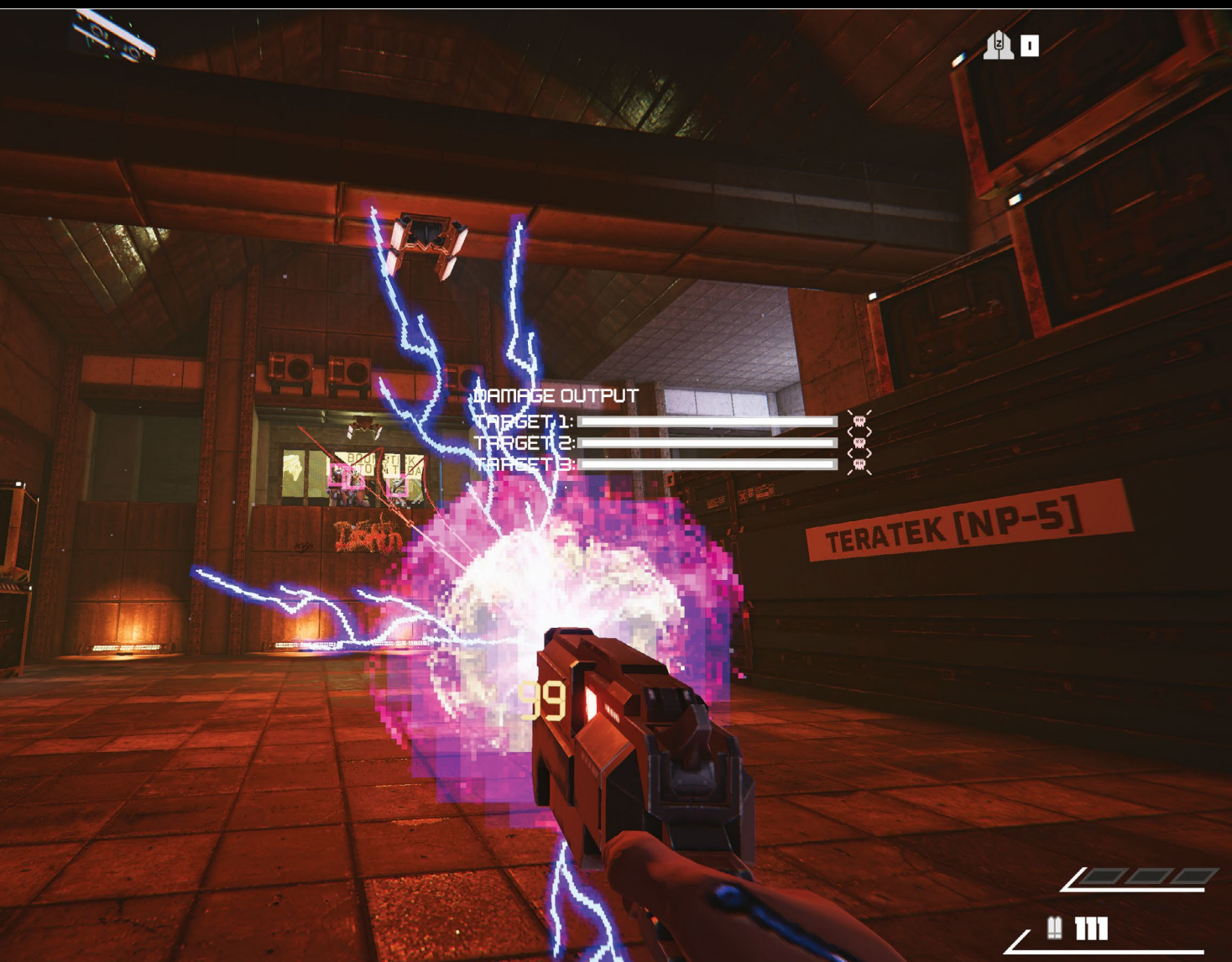
There's also a wicked sense of humour at play. It starts when you're asked to choose a difficulty level, which are named in true id style, and it's worth screenshotting the blue screen of death you see when you die – there's far too much there to take in with a single glance. The absurdity of the game itself, how overpowered you are right from the beginning, carries through to the No Chainsaws Club and the birds Turbo flips when his missiles detonate.

The other thing about *Turbo Overkill* is that, even as it enters Early Access, it feels remarkably complete. The dev could add ray tracing, maybe, add some weight to the gun feedback, add a bit of variety to the music, and improve the checkpoint system so you're not forced to repeat encounters. Today, you get one of a planned three episodes, and responding to audience feedback to improve a game as you add new content is precisely what Early Access is for. *Turbo Overkill* is polished and making sure the quality level stays where it is should be the target.

Ian Evenden

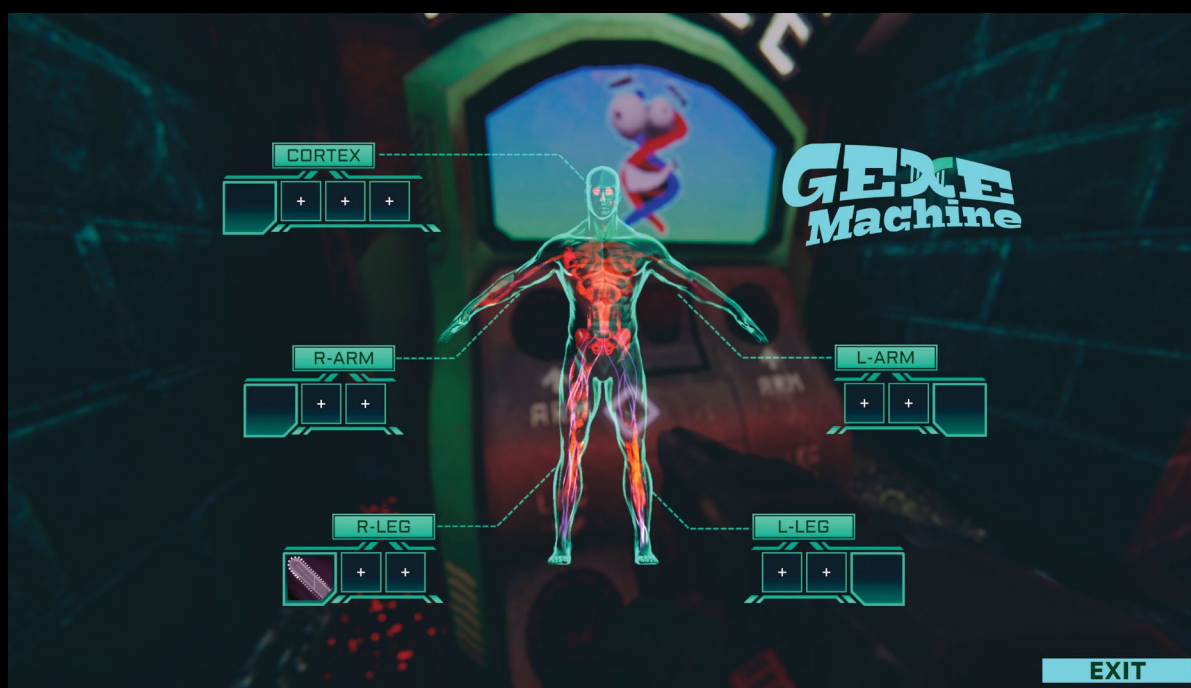
CEMENTS ITS RETRO CREDENTIALS WITH A PIXELATED, GRITTY AESTHETIC





ABOVE: Guns have secondary fire modes, like this pistol lock-on.

LEFT: Straight outta *Syndicate*, or possibly *BioShock*, upgrade your agent with new bionics via gene splicing.



Dune: Spice Wars

DESERT

For the first time in 20 years, war returns to Arrakis in real-time 4X **DUNE: SPICE WARS**

POWER

By Wes Fenlon



I thought he who controlled the spice controlled the universe, but it turns out he who controls the spice mostly just pays hellish taxes.

Here I am on Arrakis, spreading Fremen warriors to more and more territories so I can collect enough

spice to rule the desert planet. And yet I have to pay most of my haul to the Spacing Guild as a bribe? And they want more every month? Forget this competition between the Atreides, Harkonnen, Fremen, and Smugglers factions: I hope 4X strategy game *Dune: Spice Wars* eventually includes a win condition that lets me tell the Spacing Guild to piss off. They'd probably nuke me from orbit, but I worked hard for





Dune: Spice Wars

☞ that spice, braving sandworms and massive storms and treacherous spies. If I'm gonna go out I want to end my rule like Tony Montana, mountains of spice glistening on my impressively over-sized desk.

Dune: Spice Wars is the first videogame based on Frank Herbert's books in two decades, and it's an ambitious project for developer Shiro Games. When I think 4X, I think enormous games like *Civilization* and *Total War* made by hundreds of people, packed with so many menus and tooltips I'm intimidated before I've even left the title screen. Shiro Games, meanwhile, has a team of only 22 working on this new 4X strategy adaptation of *Dune*. (Shiro developed its breakout game, *Northgard*, with a team of just nine or so devs). *Spice Wars* launched in Early Access at the end of April, with a single-player mode for now and open-ended plans for future growth.

HOW YOU DUNE?

"We need to get trust and a first wave of feedback from players: what they like, what they don't like, what they feel is balanced," says creative director Sebastien Vidal. "Everybody says, 'We're going to listen to our players and do stuff that matters to them,' but [for us] it's really the case – we want to have that feedback and develop in the direction that the

community wants to see." Vidal tells me that when the studio released *Northgard* into Early Access in 2017, players surprised them by asking for multiplayer first, so that became their focus. Shiro Games did eventually add a campaign, but it came much later. For *Spice Wars* co-op and PvP are likely going to be the first features to arrive in Early Access, along with an economic victory condition, though players could again surprise them.

Spice Wars is at the moment a somewhat dry (forgive me) 4X game, missing the personality that the best of the genre deliver through chatty leaders, narrative events, or ample

flavour text. Last year's *Old World* was a sterling example, with some events tied directly to the personality traits of your leader and others pulled from real history. *Spice*

Wars is recognisably *Dune* because of the desert and sandworms and ornithopters, but it's missing that extra layer of personality.

I crave a deeper event system that draws from *Dune* lore, like political snafus involving snubbed Bene Gesserit witches or my entire civilisation suffering a massive psychic blow when the Sardaukar show up to kick my ass.

SPICE WORLD

As it stands *Spice Wars* is refreshingly breezy for this style of

"WE NEED TO GET TRUST AND A FIRST WAVE OF FEEDBACK FROM PLAYERS"



BELOW: The map view highlights points of interest and special resources in each territory.



strategy game, though, with my first game ending in less than four hours. And it wasn't mindless: I got the sense that I could play *Spice Wars* significantly differently in control of another faction or if I was gunning for a different victory condition. It took me until deep into my first game to start understanding the depth of many of its mechanics and how much more I could've done with them, knowledge I'm looking forward to exploiting in another run.

As the Fremen I was able to keep my armies healthy in harsh desert conditions and summon worms to travel vast distances, but I was particularly unpopular in the political Landsraad council, so I spent far too long ignoring the monthly votes that granted factions major advantages. I focused on growing my military and economic tech trees and missed out on how powerful espionage could be, too. If I'd devoted more spies to the Atreides house, I may have been able to assassinate Duke Leto before he'd successfully installed himself as governor and clinched a political



FOUR HOUSES *Who you'll be playing as, and scheming against, in Dune: Spice Wars*



ATREIDES

Leader: Duke Leto Atreides

Key strengths/weaknesses: Can peacefully annex territories, but cannot pillage neutral villages.

If you want to prioritise politics over warfare, Atreides is the faction to play as.



HARKONNEN

Leader: Baron Vladimir Harkonnen

Key strengths/weaknesses: Can use Oppression ability on villages, but loses resource production without active militia. Nobody likes you, but oppressing villages gets results, strengthening your army and bolstering your stable of spies.



THE SMUGGLERS

Leader: Esmar Tuek

Key strengths/weaknesses: Can place underworld headquarters in enemy villages, but limited access to political Landsraad.

Money rules everything, including your army of pricey but powerful and plentiful mercenaries.



THE FREMEN

Leader: Liet Kynes

Key strengths/weaknesses: Slower military supply drain, but limited access to political Landsraad.

Expert desert warriors, the Fremen are largely excluded from politics but can ally with independent sects around the map to gain authority.





☺ victory. But I was at least able to train up an army of Fedaykin warriors powerful enough to stomp Baron Harkonnen's troops and destroy his heavily fortified capital after an extended siege.

That was satisfying, but you can't think too hard about how *Spice Wars* has grafted Dune onto the framework (and budget) of a basic 4X. You can place buildings on a small grid within each territory, but their location is mostly meaningless. Outside of a few unique units and tech tree differences, the Fremen mostly play like the Atreides, who aren't all that different from the Harkonnen, and so on. Should the Fremen really be conquering territories, manufacturing whatever the heck plascrete is, and paying spice taxes to the Spacing Guild?

Vidal knows there's still work to do there. "One of the things we liked from the old board game from the '90s was the asymmetry," he says. "We thought it would be interesting to have a game where factions play very differently. At

some point we wanted to push that – too much, to be honest. We'd have one game per faction, almost... the asymmetry of the factions was quite important for us. We want to push that further as we develop."

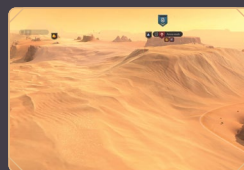
I SPY

Early Access will give *Spice Wars* the opportunity to root itself more deeply in Dune's universe, and Shiro Games already has some ideas. Currently when you start a game you pick two councillors who give you certain perks – House Atreides' Gurney Halleck unlocks a special military unit, for example – but they're more mechanic than character, with no dialogue or interactivity once the game begins. Vidal wants to change that, though this plan is still tentative.

"The plan right now is two of them will be warrior-type councillors, and they'll be actual units you can use in the game, so you'd probably have Duncan Idaho running into the desert and fighting with his troops," he says. "Two would be unique agents you could

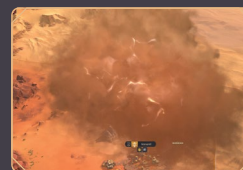
WASTELAND HAZARDS

The other factions aren't the only threat on Arrakis



DEEP DESERT

This stretch of sand will quickly sap the supplies, and then health, of any lesser warriors attempting to cross it on foot.



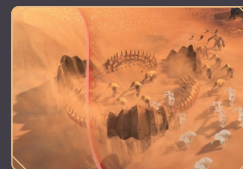
SANDSTORMS

Massive storm clouds roam the map, destroying ornithopters and armies outside protective villages.



FREMEN SIETCHES

Independent Fremen communes will send raiding parties at you unless you form an alliance by trading water.



SANDWORMS

Leave troops outside a village too long, especially in combat, and a worm will arrive to swallow your entire army.



use for spying, and they'll have unit powers as well, so they'll be more important to the player."

Shiro's ideas for a campaign mode are also still open based on what players want. "We have ideas to do different types of campaigns: some very narrative driven, some more open and systems based. It could take very different forms. The campaign is somewhere we have room for more literary stuff."

There are other plans for instilling Arrakis with more life, like rebel war bands crossing the sands to attack your villages and even bigger coriolis sandstorms, like the one Paul Atreides escapes in after fleeing the Harkonnen. Vidal wants players in *Spice Wars* to feel less in control on the untamed Arrakis than they do in a game like *Civilization*. There are likewise plans to deepen existing mechanics, like adding more proximity bonuses between buildings to give their placement on the map a bit more meaning.

"We're also looking at the late game right now," he says. "It works,

ABOVE: *Spice Wars* looks quite nice despite being one big desert.

but it's a bit too bland for our taste. We want to add something, maybe starports and starships, though they'd be in the air. Something you unlock in maybe the last third of the game, and that opens up more options that are unique to the endgame. We wanted to have that for Early Access, but there's only so much time in the day."

GET REAL-TIME

Despite playing with the same balance of exploration, expansion, exploitation and extermination as *Civilization* or *Total War*, *Spice Wars* is a more focused game, with supply limits keeping your armies small and water ever in demand. Their objectives of domination may be the same but the scale and stakes feel more intimate, even if the universe is ostensibly on the line here.

"We wanted to keep those very interactive and visual aspects of an RTS, where what you build matters and it's there and can be attacked and destroyed," Vidal says. "*Stellaris*, for example, is very abstract, and most people actually play from the map view and don't ever go into the planetary systems, because you don't need to. We didn't want that for this game. That led to a lot of decisions [focused on] making things look real and placed in the world."

After the scale of *Total War's* combat, I did like zooming in on my

small units of Fremen warriors and micromanaging them in battle, watching them chew through Harkonnen soldiers and level up. Likewise there was a real tension sending them across a sandy wasteland and watching their supply meters ticking down the longer they stay outside my territory. Single units in *Total War* are meaningless, but I was heartbroken when two of my veterans were swallowed up by a sandworm while running for the rocky safety of a settlement. *Spice Wars* is already able to tell some of these small stories effectively, even without a campaign.

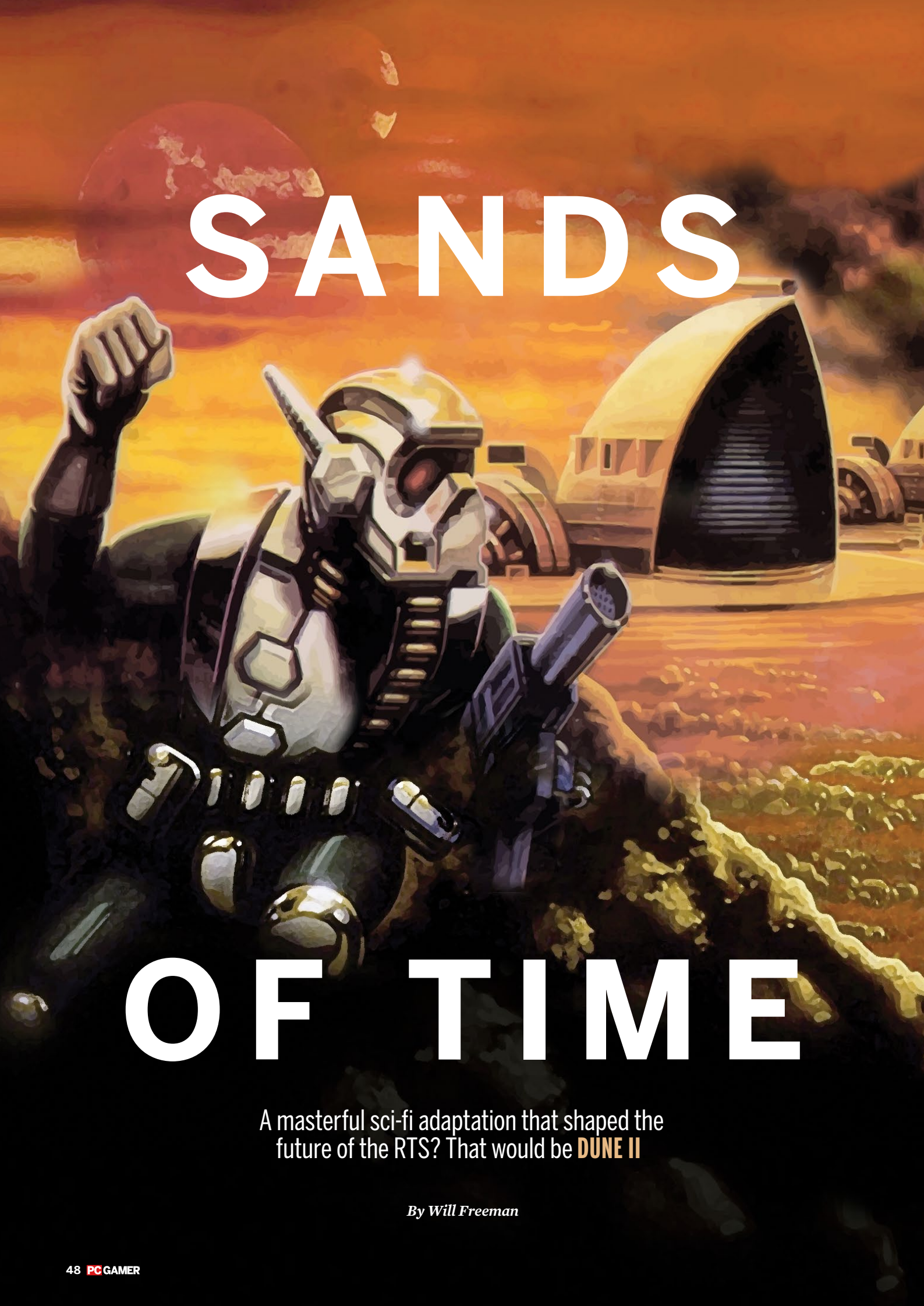
"If I want to talk about it with my friends who play the game afterwards, that's a good sign," Vidal says. "That's true for many games, but especially for 4X games. It must tell stories, even if there's no

"WE HAVE IDEAS TO DO DIFFERENT TYPES OF CAMPAIGNS"

direct narration."

A year from now I hope *Spice Wars* is weaving in scripted narration, too, and using characters to give each faction rather more life. In Herbert's original novel, Muad'Dib says, "There is no escape – we pay for the violence of our ancestors." I'm not saying that quote alone is justification for *Spice Wars* stealing *Old World's* generational heir system and complex relationships, but, well, is Dune truly Dune without knife duels settling everything from the fate of the universe to petty grudges? ■



The background is a stylized illustration of a desert planet. A large, glowing red sun dominates the upper left. In the foreground, a robotic figure with a white and grey body and a red eye is shown from the waist up, raising its right fist. To the right, a large, dome-shaped building with a dark interior is visible. The ground is sandy and rocky.

SANDS

OF TIME

A masterful sci-fi adaptation that shaped the future of the RTS? That would be **DUNE II**

By Will Freeman



When Frank Herbert began to pen the first Dune novel, video games were in an entirely nascent form. In 1965,

when his iconic sci-fi work was published, a mere handful of games had been created, often for looming mainframe computers as research projects.

However, in starting to build out his world of interstellar feudal conflict, political drama, and the desperate mining of a powerful drug called 'melange' or 'spice', Herbert set in motion a series of events that would have a profound influence over the real-time strategy genre, and even the wider gaming landscape.

Herbert's tale initially appeared as a run of serialised pieces in Analog Science Fiction and Fact magazine. Soon after, Dune was released as a novel, which would in turn inspire numerous sequels written by Herbert and later his son. Such was the first book's popularity and influence on science fiction that it inevitably attracted the attention

of Hollywood. Though, as it turned out, the vast and intricate setting Herbert had spun from words was far from easy to adapt into a celluloid release. Over the years Dune movies have been panned and canned, with David Lynch even disowning his infamous 1984 film version. In fact, it was 2021 by the time a Dune movie arrived that most felt was worthy, with director Denis Villeneuve at the helm.

A TALE OF TWO DUNES

Games, meanwhile – with all their interactivity, intricacy, and freedom from linear storytelling – proved to be a little more suitable when it came to communicating the spirit and tone of Herbert's creation.

Not that the effort to make a Dune game started flawlessly. Developer Cryo's MS-DOS title *Dune* was plagued by a hellish development. Thanks to a somewhat bewildering series of contract complexities, divided opinions, publisher acquisitions and other business shenanigans, it was almost cancelled. The story goes that when Cryo's game looked certain to derail from its production schedule, Virgin turned to

ABOVE: RTSes have come far – yet *Dune II* set so much in place 30 years ago.

Las Vegas outfit Westwood Studios to take its own shot at crafting a title based on both Herbert's novel and Lynch's film. Cryo then convinced the publisher to proceed with their release, and the quietly brilliant blend of adventure and strategy made it to the public via Virgin in 1992.

But then something extraordinary happened. Virgin proceeded in publishing Westwood's version – also in 1992, as *Dune II: Battle for Arrakis* (or *Dune II: The Building of a Dynasty* in the US). Was it a sequel? It might have been presented as such, but the games took very different approaches. *Dune II*, perhaps, just made it over the finish line in second place.

Regardless, Westwood's game became a very important release. It wasn't the first real-time strategy title, but confidently built on the groundwork laid by RTS and MOBA genre pioneer *Herzog Zwei*.

THE ARCADE RTS

Westwood reportedly openly credited Technosoft's curious blend of 2D action game and strategy title as a core inspiration over *Dune II*. A Mega Drive exclusive released in 1989,



Herzog Zwei might best be described as a 'proto-RTS', and presented the case for bringing real-time elements into strategy games. Technosoft's devs gracefully explored ideas like real-time resource management and unit commands, while its core concept was focused on advancing towards the heart of enemy territory. Crucially, though, players interacted with the game's systems by piloting a single starfighter, shmup style. *Herzog Zwei* remained deeply rooted in conventions from arcade gaming.

As such, it was *Dune II* that really established what an RTS could be, popularising the genre and establishing design conventions that were eagerly embraced by the teams that would build seminal works such as *Age of Empires*, the mighty *Warcraft* franchise, *Total Annihilation*, and Westwood's own *Command & Conquer* series. In turn, those games and others shaped by *Dune II* would have significant roles to play in progressing the RTS form, and even the emergence of contemporary online fandoms, the notion of massively multiplayer online games, titles maintained as live entities and even the snowballing phenomenon

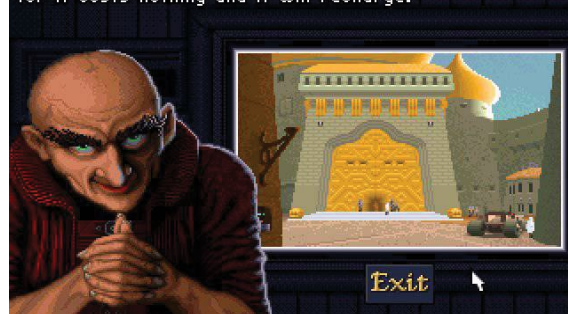
that is esports. Let's be clear. It would be a substantial overstatement to credit *Dune II* with directly inspiring what esports has become; and yet Westwood created something that has a tremendous legacy, and a role to play in so many of the trends currently at the front and centre of what the modern gaming medium is.

PAPER PROTOTYPING

Dune II's impact on gaming is founded in a simple notion. Westwood made a very good, truly innovative game with some brilliantly rewarding, elegant systems at its heart. Yet it was about more than that, and Herbert himself likely deserves a good dose of credit. The author wrote into being a world that had all the constituent parts of an RTS; warring factions, coveted resources, distinct rival cultures, political tensions, competition, and an obsession with harvesting the supplies of claimed lands.

Westwood, in turn, spotted an opportunity to build a game that captured the heart of what *Dune* was; not its winding narrative, or host of characters, but its very essence. While Cryo's game loosely followed

Utilize your Palace's special option whenever possible, for it costs nothing and it will recharge.



ABOVE: Granting opposing sides distinct abilities and options set a standard for the RTS genre.

the narrative of the book and film, and was clearly informed by a sincere love of Herbert's work, Westwood stripped the plot right back and concentrated on the premise of controlling the territory of the planet Arrakis; the only place in Dune's fictional universe where the all important spice can be found.

Some years earlier Westwood producer Brett Sperry was at work on the Dungeons & Dragons branded RPG *Eye of the Beholder*. An idea formed in his head, and he couldn't shake it. He wondered how he could replicate *Eye of the Beholder*'s real-time action in a game constrained to a singular top-down viewpoint, with more of an emphasis on strategy and resource management. He and his peers even worked on a scattering of prototypes. But it was talk of working on a *Dune* title for Virgin that finally let Sperry fully develop his concept for a new type of game.

The combination of Herbert's meticulously constructed world and Sperry's notion that real-time and strategy could be blended formed a perfect combination. The novel gave Westwood all the elements for a real-time strategy game that greatly elaborated on Technosoft's effort

HOUSE RULES

Dune II pits three Houses – Atreides, Harkonnen, and Ordos – against one another in a battle to claim the

DUNE BUDDIES

Dune II's sequels and remakes



DUNE 2000 1998

A partial remake and semi-sequel, *Dune 2000* took much inspiration from *Command & Conquer*, but failed to rival *Dune II*'s quality.



EMPEROR: BATTLE FOR DUNE 2001

Dune 2000's direct sequel complied to Westwood's RTS template. It wasn't perfect, yet had capacity for fun.



DUNE LEGACY 2003

One of several fan remakes, *Dune Legacy* gently modernises *Dune II*'s systems while endeavouring to preserve the gameplay.

profitable lands of Arrakis. Having picked a side, you are initially tasked with missions that guide establishing a base of operations on the famously sandy planet, while mastering spice harvesting and combat. Over time the focus shifts to attacking enemy infrastructure and territory, gradually advancing on the ultimate prize of occupying all of

Arrakis. The result was a compact RTS that bristled with pace and shifts in dynamic – and a game that felt very much like an extension to the original novel.

OVER TIME THE FOCUS SHIFTS TO ATTACKING ENEMY INFRASTRUCTURE

Dune II's real accomplishment, though, was in introducing so many new elements that worked cohesively together. There was the asymmetrical nature of the different sides' available military hardware and units, and the

option to establish your starting base anywhere of your choosing. Players adored the ability to gather resources to enable unit building, and the

system of structural dependencies. The latter ensured that to create the most desirable units, you have to go through a chain of constructions, starting with the most basic buildings. The 1993 Mega Drive port would even present an early example of the context sensitive cursor.

In a single game, Westwood had taken the RTS genre forward an astronomical distance, and set a template that still defines the form today. The elements it brought together have become stalwarts in all kinds of other genres, cropping up in MOBAs, MMORPGs, city-builders, action RPGs, and so many other forms.

Strangely, while genre-devotees know and cherish what *Dune II* is, it has never become a household name like *Warcraft*. That may change, though, with *Dune: Spice Wars* recently released to a bounty of praise. And yet *Dune II* might well still be the most fitting Dune adaptation there is, because it places you in Herbert's world, rather than his story. And that world, it turned out, was the perfect blueprint for the most influential RTS there has ever been. ■

FAR LEFT: *Dune II*'s visuals haven't aged perfectly, but its tight presentation made it a joy to play.

BELOW: Aside from pioneering the RTS genre, *Dune II* also featured rather lovely pixel art.



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FEATURE

MAXIMUM THE

MAXIMUM | Elden Ring

MINIMUM

Inside the often-
thankless, quietly
imaginative task of
developing for
LOW-SPEC GAMING

By Edwin Evans-Thirlwell

Elden Ring | **MINIMUM**



Chuhai Labs co-founder Giles Goddard thinks minimum settings are going out of fashion. A veteran of

Nintendo in Japan who has worked on everything from Amiga and N64 to Wii and Oculus Quest, he's noticed a change over the years with regard to developing for different PC specifications. "It used to be that the developers would aim for the lowest spec, and they'd make it look great on that, regardless of anything," he says. "And then, if you had a faster PC or graphics board, you could put more bells and whistles on top for post-processing effects or whatever, but only to make what was already there nicer-looking.

"I think nowadays, because everybody's got a [powerful computer] the bar is so high that all the AAA makers are basically just aiming for the highest spec PCs. They're assuming that if you're going to pay that much for the game, you're also going to pay a lot for your gaming setup [so] obviously, they spend a lot of money, time, and effort making the games as great as possible on those machines. I don't think it's really in their interest any more to aim for the lower spec. It definitely used to be the priority, I think, maybe ten or twenty years ago."

HIGH LIFE, LOW SPEC

These shifting priorities are reflected, Goddard suggests, in the way games are discussed and reported on. "It used to be quite a hot topic – if you turn on these settings on this PC with these specs you can get these kind of graphics. It used to be in all the reviews and all the magazines, how to get the most out of this game. And that's just not talked about – you just assume it's going to be max settings."

"That goes with my experience of this sort of stuff," agrees Terry Goodwin, technical director at Lab42, whose projects include the PC versions of *Yakuza 0* and *Yakuza Kiwami*. Studios that specialise in porting tend to feel it most when clients neglect lower spec hardware. "Especially with developers that are very PC-focused, even if their goal is not to make the most amazing-looking game, they often don't think

about the low end at all, which is a problem for us when they come along and say they want a Switch version, or whatever." On PC especially, he says, "Optimisation is not as considered as much as it probably should be."

One reason it's a fine time to pay more attention to lower spec gaming is that it's better for the environment. Playing with the settings turned down tends to consume less electricity, though newer components may be more energy-efficient in themselves, and supporting older hardware is obviously more sustainable. Developing for cheaper components also makes games more inclusive – an important extension of conversations about diverse representation or creating accessibility options for players with disabilities. But the simpler point is that tailoring and optimising a game for leaner PCs involves a lot of craft that tends to be disregarded amid the industry's endless arms race for the cutting edge. It's every bit as much a 'feat of technology' as capitalising on the latest rendering techniques.

BOTTOM: *GTFO* uses fog as a tool for both atmosphere and performance.

TAKE YOUR BENCHMARKS

Choosing and developing for a minimum specification is a complicated battle that, ideally, begins on the very first day of production. "When you set up a production, you set up budgets, right?" says Hjalmar Vikström, co-founder and game design director at 10 Chambers, developer of horror squad shooter *GTFO*. "So the financial budgets, of course, but then you have performance budgets, memory, RAM, some kind of performance goal for certain hardware. And that's basically

"WHAT'S THE TARGET AUDIENCE, WHAT'S THE LOW SPEC AND THE RECOMMENDED SPEC?"



DEAD RECKONINGS

René Tschacher explains how the dev tailors simulations like *Dead Man's Diary* for lower-spec PCs



"We usually get the best results from the resolution, or resolution scaling. The range of shadows is also an aspect that can be easily scaled down."



"Performance, lighting and shadow rendering [are the biggest challenges for photorealistic 3D games]. Object optimisation and powerful shaders must also be considered."



where that whole thing starts. What's the target audience, what's the low spec and the recommended spec? And what you do then is you test for that all the time.

"If [any single] team is responsible for the low spec, that would be the delivery team in our company, or what you would call QA." But adhering to those target specifications is a task for everybody. "There's always a big combination of QA, programming, technical artists, and render programmers and system programmers, a whole big team effort to make the game perform. In any production I've been on, performance is a concept you always work on, because when a game is not performing, the rest of the experience is suffering."

Hence, among other things, *GTFO*'s marvellous fog, which blends and accommodates the needs of artists, narrative designers and programmers. On one level it's a homage to *Alien*'s murky corridors; on another, a way of avoiding 'load steps' or incremental environment loading, to keep the framerate up and minimise work for artists. "So performance is a thing, and the visual inspiration comes from *Alien*, and we're a small team with limitations

Low-Spec Gaming

on our art pipeline – all that comes together to create a plan. Fog is not there for performance, but [...] it fits together and we leverage that as much as we can.” Some players miss the point here, Vikström adds, assuming that the fog exists simply to lessen the load on the game’s engine. “The fog in *GTFO* is so much more than just a vision limiter, it’s a mood setter, right? So sometimes I get the question, can you disable the fog? And I’m like, ‘No, you’re basically disabling half the game.’”

For a small team like 10 Chambers, testing for things that threaten the target specifications can be practically a horror game itself. “A simple chair could be low res in polygons, but then accidentally have a super high res shadow mesh, or something like that. It’s a simple problem to fix, but first, somebody needs to find that. So you need to have an analytic toolset to evaluate the complexity of the meshes. Do some kind of filtering to see if, oh, there’s a shadow mesh here with tens of thousands of polygons or triangles – that doesn’t make sense. Or maybe the test is automated, and then maybe somebody needs to add safeguards, but it could also be that our render programmer needs to optimise the order in which things are rendered, or an assistant programmer needs to make sure that chairs are never rendered if they’re behind a door.”

It might sound more sensible to focus on honing an optimum look and framerate, then dialling things back for less powerful systems down the road, but this can be catastrophic, Vikström says. “It’s really hard to go down in quality after years of production. You need to plan for low spec straight away, and constantly



work towards it. Because after a couple of years, if you don’t do that, it just becomes too big of a hurdle. And then your low spec slowly creeps up until it’s meeting your high spec.”

SETTING EXPECTATIONS

While he feels that developers today disregard lower spec machines, Goddard also suggests that today’s players have more ways of customising their PC games today. “You have settings for everything, like turning the rain on and off. I think it’s become more a question of personal preference, rather than whether your PC can handle it, and I think people expect to have the control. Because maybe they have really specced-out their PC and they know exactly what

ABOVE: Lab42 repurposed existing features of the game’s engine into graphics options for low-spec machines.

it can do. Whereas in the old days, it was basically choosing low, medium or high, and the game would decide what to turn off and on.”

This certainly encapsulates Lab42’s approach to porting *Yakuza*. “A lot of the time, designing settings isn’t a matter of making those things exist, but exposing them,” Goodwin comments. “[For *Yakuza*] we looked at what was in the engine, and just made a slider and graphics option for literally everything that was going on.” The studio repurposed the game’s level-of-detail system, for



SKY HIGH

Alexander Murphy on bringing *MoH: Above and Beyond* to the Oculus Quest platform



“Respawn had done such a fantastic job giving players an immersive experience by playing a wide range of audio tracks simultaneously. To get the performance level we wanted while staying within budget, we removed some subtler tracks after optimising the sound.”



“Framerate is king in VR, so that took priority with graphics resolution close behind. We also added some features, such as the ability to toggle the multisampling anti-aliasing level. Since this is a VR project, we had to set up an entirely new build and testing pipeline.”



“There is a misconception that [porting] is ‘easy’ since you have the base game to work from. In reality, optimisation is a difficult challenge that requires a robust set of tools, strict technical guidelines and talented artists who know how to make the game shine.”



“THE FOG IN GTFO IS SO MUCH MORE THAN JUST A VISION LIMITER, IT’S A MOOD SETTER, RIGHT?”

example. “Where things that are far away render at reduced detail – it’s quite trivial to use that system as a graphics feature, which is what we did for geometry. If it’s lower then we force the lower [detail] ones, if it’s higher than we turn on the higher ones all the time, or if there’s particularly attractive visuals in a cutscene, I think we added a setting where you can use cutscene models for the main characters in the rest of the game.”

Lab42 added a few computing-intensive options for beefier systems, such as supersampling anti-aliasing, which renders graphics at a higher resolution than your screen, then squashes them down to smooth out edges. But Lab42 was also keen to support older computers by, for instance, accommodating processors that don’t support the latest SSEs or Streaming SIMD Extensions

(essentially, instructions for how your PC thinks). “We went in and rewrote everything to work with the second set of instructions, implementing all of the stuff from the third set in the second set, so that it launched on all the machines – that was important to us, because we wanted to let everybody run it.”

MINIMUM’S THE WORD

The intricacy of solutions like these reveals that optimising a game to work on older or cheaper PCs isn’t just about selling to a larger audience. There’s a playfulness to it, with different settings giving rise to different aesthetics within the game’s overall direction. It’s not just about making compromises, but

experimenting with the look, sound and feel of the simulation.

To design for lower specifications can, moreover, be an exercise in time travel. “Talking about SSAA in *Yakuza*, we did enjoy that you could really crunch down the resolution, but keep the UI sharp, so it looked like a PS1 game or whatever,” Goodwin says. “Stuff like that was fun to do.” *GTFO*, similarly, resembles a totally different game when you drop the resolution and peel off the UI. “I really enjoy that you can do that – hide the UI, go down to 720p or below, and get this old-style *Quake* feeling,” Vikström enthuses. This is, of course, especially the case for games that openly try to bridge old and new in their narrative or visual concept, such as Trigger Happy Entertainment’s forthcoming *Turbo Overkill* (see p40), which blends a flashy cyberpunk setting with the chunky pixels of classic *Doom*.

The usual conflict between features and performance aside, *Turbo Overkill* is a tug of war between different eras of videogame graphics. “When I first started the project, I made a list of rules that I should follow,” says lead developer and *Doom* modder Sam Prebble. “Like, you can’t use any technology like shaders, or reflections, advanced lighting methods, that were invented after the year 2000. I would try to avoid putting those into the game [...] but eventually I got to a point where I just didn’t like the way it looks. If I want a neon-drenched cyberpunk city where it’s always raining, you have to have reflective surfaces, there’s no way around it – well, there probably are ways, but everything I tried wasn’t very pleasing to look at.”

RIGHT: Shadows are often the first thing to go at lower specs.





“YOU DON’T EVEN HAVE TO MAKE REDUCED POLYGON VERSIONS OF THINGS ANY MORE”

“So I kind of just stumbled into slowly adding more modern rendering techniques, and I just got to a point where I said, ‘OK, screw it. I’ll just throw it all in, but try and ground it in a retro look, or I guess it’s kind of cringy, but ‘retro plus’, to find a nice balance of modern and old technology.” Prebble has spent the best part of a decade picking which assets to update. “It’s like, this headset doesn’t look too great. I could go back and bring it up to scratch, but I don’t want to polish it too much and detract from the original look of the game.”

KILL SWITCH

One ironic outcome is that *Overkill* currently requires quite a ‘hefty’ PC. But it does accommodate players who want to excise the modern flourishes and experience something like Prebble’s original, heavily

TOP: Those lowered settings are often more noticeable in motion than in screenshots, but on the whole we were impressed with how well a lot of games hold up.

rule-bound retro prototype. “I have seen a lot of people run the demo on low settings, and some people look at that and say it’s a retro game, it’s supposed to look chunky. I kind of agree with that. Originally *Turbo Overkill* had a pixelation filter in it, which is something I used to play with all the time, just because I liked the look of, you know, low resolution graphics.”

Prebble is considering a lo-fi version for ‘potato PCs’, following on from the lo-fi options he made for his *Doom* mod *Total Chaos*, which “basically downgraded all the textures and stripped out a lot of shaders and all our models had half the polygons. That’s something I’d love to do for *Turbo*, but it would only be later in development”.

BOXED OFF

There are parallels between low-spec gaming and demaking, the practice of remaking a game to run or look as if it’s running on old hardware. They’re arguably the same thing – demaking redefines developing for lower specs as an art form deserving celebration. Having spent decades wrestling various technologies into submission, Goddard is both fascinated and repelled by the thought of adapting new games to platforms such as Gameboy. “To me it just sounds like hitting my head with a hammer non-stop. That doesn’t seem to be anything enjoyable there from my point of view, but because [younger developers haven’t] gone through all that pain they don’t see it – they find it fascinating and really intriguing.”





Goddard argues that for larger established teams, the question of high or low spec may become irrelevant in a few years thanks to technologies that automatically adjust for different hardware capabilities. Take Unreal Engine 5's geometry system Nanite. "Basically, you throw as many polygons as you want at it, and it just figures it all out. Up until now all the games I've ever made [have been] a constant battle for framerate. You're always trying to reduce polygons. With UE5 now you don't even think about it. You don't even have to make reduced polygon versions of things any more. Everything's automatic."

Features like these could transform the industry, he says, much like the spread of intuitive

middleware tools such as Unity. "It's getting to the point where it's no longer a programmer job worrying about framerate. It's basically artists buying assets from a store and throwing them in without even worrying about texturing or LOD or anything like that. Three million polygons, ten million polygons, whatever, just throw it in and it just works on any hardware. So that's the kind of end goal of all this fighting over settings – it's all just handled within this black box here."

This certainly sounds like it would remove much of the stress from projects like *GTFO* and *Turbo Overkill*. But from a player perspective, it's energising and inspiring to be given more direct control over how a game looks and

AAA TO B

Three developers offer thoughts on trends in blockbuster game visuals



**GILES GODDARD,
CO-FOUNDER,
CHUHAI LABS**

"It's interesting to see what will happen with 8k and ray-traced graphics, because I think we've hit the limit for resolution with 8k. [With real-time ray tracing] it's going to be less about turning settings off and on [because] it renders the world as in real life. It's very hard to turn things on and off with ray tracing."



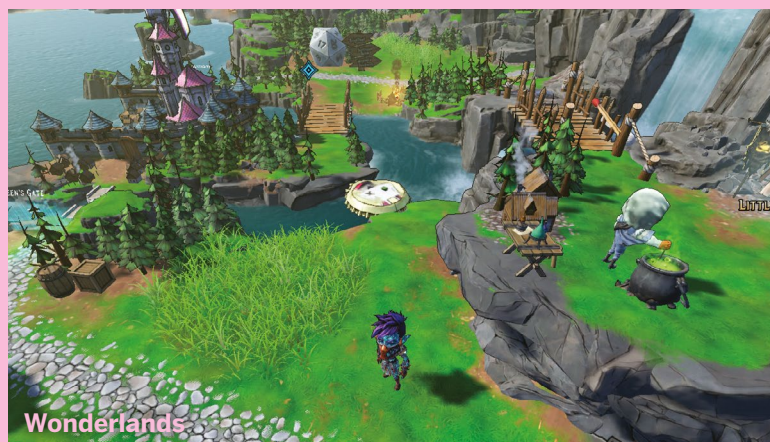
**TERRY GOODWIN,
TECHNICAL
DIRECTOR,
LAB42 GAMES**

"People are always saying, how can they possibly get better than this? I think there will always be new ways of representing some facet of reality that you didn't realise was missing until it's put in a game. And everything looked really great before then, you just didn't really notice."



**ALEXANDER MURPHY,
PRODUCER,
VIRTUOS PARIS**

"I think the focus will be on small details. Is your fox made of four polygons with one animation, or will it be a fully scanned animal with multiple animations? I think we'll see more games using unique art styles to stand out. Games like *BioShock* and *Dishonored* have 'realistic' art styles but with their own twists."



LEFT: Wonderlands has a huge spectrum of graphics settings. At the lowest, most background NPCs are removed to improve performance.

runs. And as Vikström concludes, planning out a game so as to accommodate lower specs is a source of creative satisfaction. "You have expert programmers, expert artists, expert sound designers and storytellers, and they're all working together as tightly as they can. That's one of my favourite things about game development – these really varied talents that need to work together. And also, the big challenge." ■



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REVIEW

HOW WE REVIEW

We review each game on its own merits, and try to match it to a reviewer who's a passionate expert in the field. The main aim of reviews is to help you make buying decisions. To this end, we're selective about what we review, and try to focus on the notable, interesting, exciting or surprising.

DOWNLOADABLE CONTENT

DLC might be new missions for a game, or it might be a single new item. If we think you want to know about it, we'll review it.

EARLY ACCESS

Any released alpha, beta, or otherwise unfinished game that you can currently pay for. For these games, we won't assign a score, but we will tell you whether they're worth your time.

THEY'RE BACK

Whenever there's a bargain or re-release of a significant game, our expert will revisit it and tell you whether it holds up today. With jokes.

OUR SCORING SYSTEM EXPLAINED

00%-09% Broken or offensively bad; absolutely no value.

Example *Leisure Suit Larry: Magna Cum Laude*

10%-19% We might be able to find one nice thing to say about it, but still not worth anyone's time or money.

Example *Gettysburg: Armored Warfare*

20%-29% Completely falls short of its goals. Very few redeeming qualities.

Examples *Family Guy: Back to the Multiverse*

30%-39% An entirely clumsy or derivative effort. There's little reason to play this game over a similar, better one.

Examples *Trials of the Blood Dragon*

40%-49% Flawed and disappointing.

Examples *Aliens: Colonial Marines*

50%-59% Mediocre. Other games probably do it better, or its unique qualities aren't executed well.

Examples *Primordia, Homefront: The Revolution*

60%-69% There's something to like here, but it can only be recommended with major caveats.

Examples *No Man's Sky, Ghost Recon: Wildlands*

70%-79% A good game that's worth playing. We like it.

Examples *Prey, NieR: Automata*

80%-89% A great game with exceptional moments or features, and touches of brilliance. We love it.

Examples *Overwatch, Night in the Woods*

90%-94% A compelling recommendation for most PC gamers. Important to PC gaming, and likely ahead of its time.

Examples *Bayonetta, Dishonored 2*

95%-96% Far and away one of the best games we've ever played. We recommend it to the entire world.

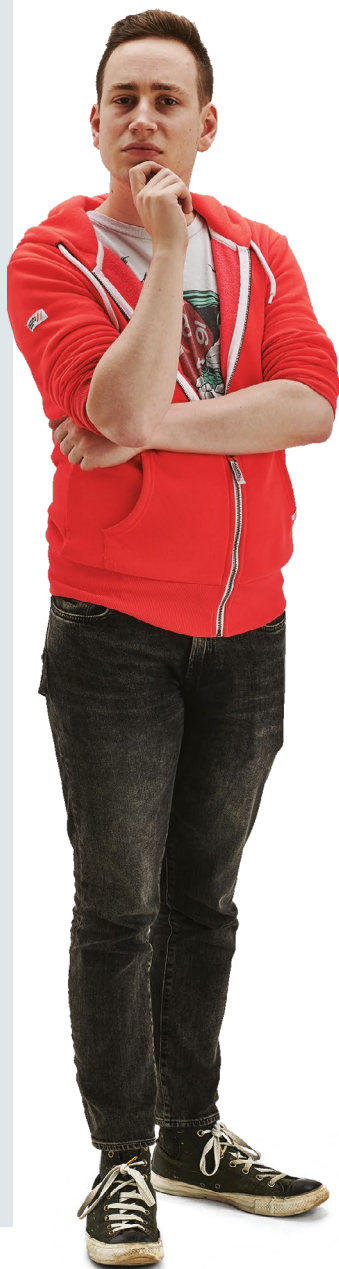
Examples *Half-Life 2, Kerbal Space Program*

97%-100% Advances the human species. Boosts the immune systems of nearby children and small animals.



The Editor's Choice award is granted in addition to the score, at the discretion of the PC Gamer staff. It represents exceptional quality or innovation.

Find out more
www.bit.ly/pcgreviews



Small claims

As games journalists, we naturally spend a lot of time talking about the big things when it comes to games – the core concept, the overall art style, the thrust of the story. But part of me thinks that the things that really make a game sing are the little details, small choices that add up to that intangible ‘gamefeel’. Take the cumbersomely named *WH40,000: Chaos Gate – Daemonhunters*. The big picture is immediately appealing – it's Warhammer *XCOM*, and it executes that really well. But the things that will make it stick in my memory are small touches, like the way the Space Marines move, appropriately agile despite their heavy armour, or the wonderfully neurotic dialogue of your on-board Tech Priest, or the fearful, frenzied barks of cultists as they see you coming. Sometimes not seeing the forest for the trees just means you're looking at some really lovely trees.

ROBIN VALENTINE

PRINT EDITOR

robin.valentine@futurenet.com

**LET US KNOW
WHAT YOU THINK**

Email us via letters@pcgamer.com with your reactions, or simply tweet us your thoughts @PCGamer



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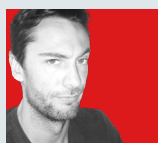
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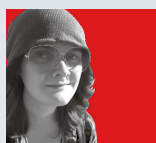
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This month's corrupted, mutated reviewers...



ROBERT ZAK
Specialist in
Purging the unclean
Currently playing
WH40K: Chaos Gate
– Daemonhunters
This month
Had fun trying to
contain an even worse
pandemic.



NAT CLAYTON
Specialist in
Smash and grabs
Currently playing
Teardown
This month
Took out her
frustrations on a
bunch of virtual
buildings.



CHRIS LIVINGSTON
Specialist in
Defying narration
Currently playing
The Stanley Parable:
Ultra Deluxe
This month
Made very good
friends with a bucket.



PHIL IWANIUK
Specialist in
Wheely bad puns
Currently playing
Moto GP 2022
This month
Took a two-wheeled
trip back to 2009.
That's 13 years ago,
and that's terrible.



RICK LANE
Specialist in
SpaaaaAAAAaaace!
Currently playing
Galactic Civilizations
IV
This month
Opened his mind to the
void, and wished there
was a tutorial.



TOM SYKES
Specialist in
Rockin' out
Currently playing
Pebble
This month
Investigated the
platforming potential
of a literal pebble. As
you do.



MATT ELLIOTT
Specialist in
Earplugs
Currently playing
Alien: Isolation
This month
Revealed his greatest
fear: well-crafted
videogame sound
design.

CONTROLLED CHAOS

Dealing with cosmic plagues in **WARHAMMER 40,000: CHAOS GATE – DAEMONHUNTERS**

By Robert Zak

Grand Master Kai looms over my crew via hologram like a Greek cybergod. It's our bimonthly report and he's not happy. Our Inquisitor's desire to procure knowledge about the Nurgle plague has accelerated its spread, and he wants to know who's responsible. Do I cover up for Inquisitor Vakir and piss off Brother Ectar, or do I throw Vakir under the bus? Whatever I do, someone will be unhappy, and that will have knock-on effects.

I go for the third option: tell the Grand Master that the mission is going exactly as planned. He buys it, and seeing as we're doing so well in our campaign (which we're really

not) he diverts our requisitions and armoury access to some other chapter that needs them more. My reluctance to attribute blame has meant I've stayed onside with my crewmates, but have also ensured that the next two months of our campaign are going to be particularly gruelling.

And here I was thinking that *Daemonhunters* would be a straightforward turn-based tactics game, content to tweak those sturdy XCOM foundations for the marketable mythos of Warhammer 40,000. Yes, you'll spend most of your time on the battlefield, hopping between planets in four-man squads

to combat a cosmic pox propagated by the Plague God Nurgle, but while *Daemonhunters* executes its combat very well, it also succeeds at all the stuff between the missions.

There is

schmoozing, politicking and appeasement, space battles, and text-based events, research and ship repair. You pick the pace at which you progress through the campaign, you balance

the conflicting interests of your frustrated, fractious crew. You're an active character in a compelling, well-written space opera, and your decisions as commander of the good ship Baleful Edict are just as important as your feats in battle.

Each crewmate on the upper decks of the ship has their own priorities within the larger conflict. Brother Ectar is a resolute Grey

The greatest threat is the Bloom, the Nurgle-driven disease

NEED TO KNOW

WHAT IS IT?

A turn-based tactics game about combating a cosmic plague.

EXPECT TO PAY

£35

DEVELOPER

Complex Games

PUBLISHER

Frontier Foundry

REVIEWED ON

Ryzen 7 5800H, Nvidia GeForce 3070 (mobile), 16GB RAM

MULTIPLAYER

No

LINK

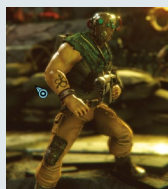
chaosgate.com

Knight veteran who's fiercely loyal to his fellow marines, while Vakir is an arrogant but dedicated (but mostly arrogant) Inquisitor who believes that marines are expendable in the mission to understand and stop the Bloom. Then there's Lucete, the charmingly robotic Tech-Priest who'll often interrupt the other two's squabbling while preaching the importance of non-emotion.

There'll be times, for instance, when Ectar will insist on observing Grey Knight traditions, such as organised fights between Marines or even dedicated days of meditation. Going through with these rituals will boost morale and grant XP buffs for your Marines, but frustrate the single-minded Inquisitor, with whom you'll suffer a penalty to research speed. You couldn't have picked a less compatible group of people, but even though they're all rather aloof and often too embroiled in their personal missions to see the bigger picture, they're well characterised through solid writing, plentiful dialogue options, and surprisingly expressive cutscenes and animation. Hanging over these onboard politics are regular reports to the Grand Master, with whom you'll need to tread carefully if you want to be able to upgrade your recruits and equipment.

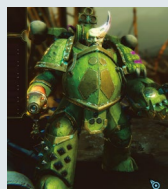
EVIL EVOLUTION

Warp Surges trigger progressive mutations in the enemy



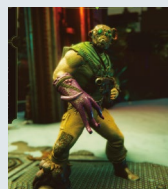
STAGE 0

An entirely unmutated cultist of Nurgle, rather wishing he didn't have to fight Grey Knights.



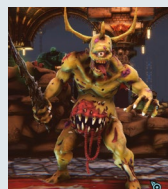
STAGE 1

This Plague Marine has grown a big horn. May not seem like much, but it's the first step on the path to greatness.



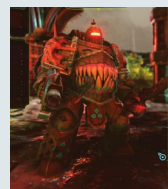
STAGE 2

A betentacled hand and a tumor-ridden foot – what greater blessing could a cultist ask for from the Lord of Disease?



STAGE 3

Horns and a mouth in his gut helps this Plaguebearer stand out from the crowd – and eat two lunches at once.



STAGE 4

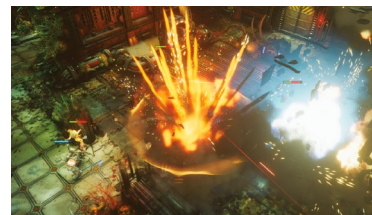
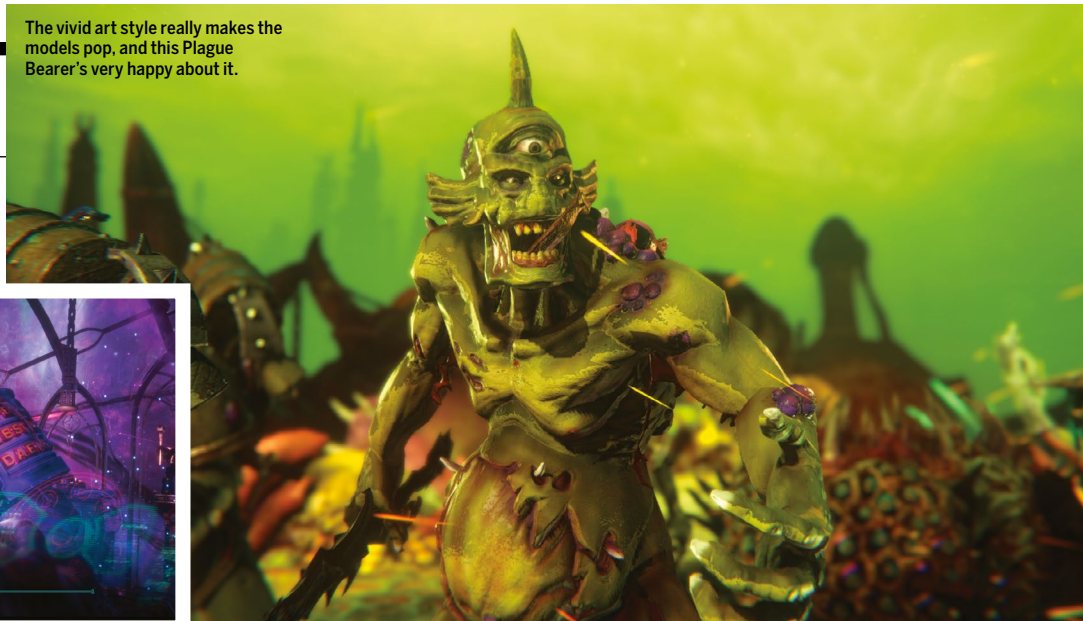
With a grimacing face on his shoulder and an even bigger stomach-maw, this guy's got a lot of mouths to feed.

BLOOM TOWN

But the greatest threat is the Bloom, the Nurgle-driven disease which breaks out on random star systems as you travel between them. Should you fail to reach an outbreak on time and quell it with your squad, that planet will gain a point of Corruption, which will make future missions there harder and increase the likelihood of Bloom spreading to other systems.

It's pretty much the core system of the board game *Pandemic* – which any fan will attest is masterful at generating tension. With that as a foundation, and the fact that your ship is seriously under-equipped at the start of the game, it makes every

The vivid art style really makes the models pop, and this Plague Bearer's very happy about it.



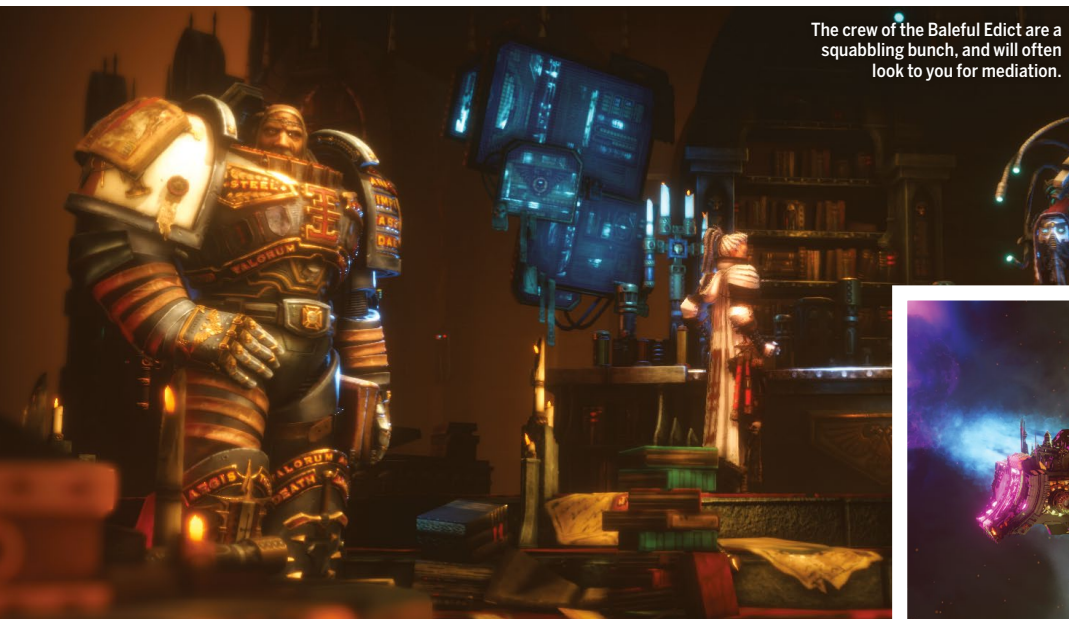
FAR LEFT: As you travel between star systems fighting the Bloom, you'll encounter random events and even fight enemy ships.



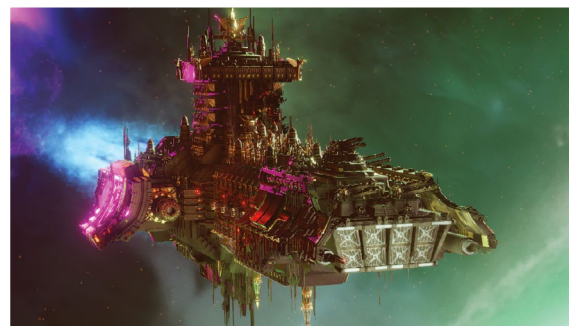
LEFT: The destructible scenery makes for some great moments of chaos (and tactical headaches).



When you're up close and personal, it's time to get surgical.

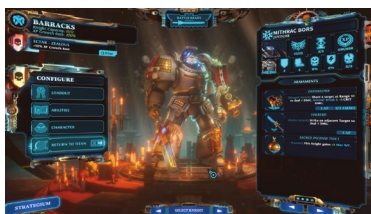


The crew of the Baleful Edict are a squabbling bunch, and will often look to you for mediation.



FAR RIGHT: Enemy AI isn't perfect, and has a tendency to go into Overwatch overload.

BELOW: You'll face some big decisions in your campaign, all with tangible knock-on effects.



passing in-game day, every trip across the galaxy, and every decision to side with one crewmate or another, a tough one that'll have consequences.

Both tension and Bloom trickle down onto the battlefield like a loathsome fungal rot soaks through soil to attack the roots of a tree. Once you deploy your squad of Grey Knights on a Blooming planet, you get down to the turn-based battle part of the game. The more blips of Bloom, the harder the mission objectives will be, the more mutations enemies start with, and the more gifts that Nurgle can bestow to his followers.

Bloom-infested planets will look different too, and I spent a good bit of time sweeping over battlefields to admire the eye-filled flora, tentacles, and other pustulant masses that crop up. To top it all off, a Warp Surge meter ticks up every turn, giving enemies visible mutations like horns and classic Nurgle gut-mouths, granting them various status boosts. The Bloom's effects on both enemies and environments are deliciously vile.

It all sounds a bit overwhelming, and indeed when enemies break out in boon-granting diseases, defeated cultists and Plague Marines rise from the dead, or zombie Poxwalkers burst from the ground, it can feel that way for a bit. The early going is tough, especially as your squad picks up injuries that usually won't have healed by the next time you head to the next battle. But once you get to grips with the depth of tactical possibilities at your disposal, things really starts to click.

The environments, for a start, are a delight of destructible potential. Beyond the obligatory explosive ammo caches and fire pits, there are pillars to topple onto enemies and bridges to destroy. Particularly impressive is the fact that most walls can be blown up, which adds a layer of volatility to even the best-planned moves. At one point, I pushed a column onto a line of four enemies, one of whom was sent flying into an ammo crate. As the smoke cloud dissipated, I saw that I'd also blasted away a portion of wall, causing an enemy patrol to come streaming in.

KNIGHT SCHOOL

Combat has some classic *XCOM* foundations, from darting between

partial/full cover to action points and core abilities like Overwatch, but beyond that it very much carves its own path. There's almost no RNG, for a start, and what's the point of relying on cover when that cover may well be blown away in the next turn? Similarly, the rich interplay of the Grey Knights' classes and abilities meant that before long I'd all but

forgotten that Overwatch existed.

Take my Interceptor, Voldred Storm, who I trained into a dual-wielding ninja with self-replenishing action points. Using Teleport Strike, I could damage

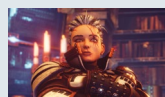
several enemies in a single AP, give that AP an 80% chance of automatically replenishing, then continue to tear up enemies deep behind their lines. Lacking Terminator armour, Voldred is a glass cannon, but I addressed that with my Justicar, who could bolster his own armour, then psychically send all of it to Voldred for one turn, making him ready to receive his inevitable battering in the next turn.

You can set enemies burning and bleeding, and use grenades or psychic abilities to send them into frenzies where they attack their own team. Stack that with an abundance of upgradeable wargear and there's lots of room for build experimentation.

Using Teleport Strike, I could damage several enemies in a single AP

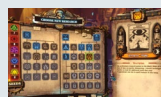
ALL ABOARD!

Things to do on your ship



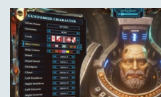
STIR UP GOSSIP

Chatting to your crew is a great way to learn about the lore – and they also love bitching about each other.



HIT THE BOOKS

Use Seeds gained in battle to fund your research, gaining Stratagems, Prognosticators, and other 40K words.



MAKEOVERS

Give your soldiers some individuality by customising their appearances. You can't go wrong with another bionic eye.



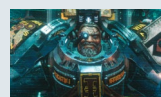
TUNE UPS

Repair your damaged ship to make it faster, deadlier, and home to even more Grey Knights.



CARTOGRAPHY

Use the map to track the Bloom's spread across the system, and spread your psychic network to more planets.



GET TOLD OFF

You may be the Commander, but you answer to Vardan Kai, who likes to call up and give you a bollocking.

But there's always a trade-off in *Daemonhunters*. Fancier psychic abilities use Willpower, which upon use tick up the Warp Surge meter, inching it towards mutations and other gifts for the enemy. To counter these, you can research Stratagem cards, which let you do one-off things like teleporting your whole squad to one location or getting an enemy to fight on your side for three turns.

There are so many nice touches that flesh out *Daemonhunters*: *Fallout*-style targeting of specific body parts, text-based spaceship battles, and 'Prognosticators' that you place on the star map to inhibit Bloom growth and get bonuses in various star systems. All these little threads are woven into the story and play experience, feeling neither excessive nor superfluous.

GREY AREA

Daemonhunters is not without a few frustrations. Enemy AI isn't too bright, often resorting to Overwatch in seemingly random directions instead of, say, shooting explosive nodes when you take cover behind them. There could be a bit more clarity in certain mission objectives too. Crucially, it was pretty poorly optimised on my setup, with sluggish framerates that don't respond even to drastic decreases in graphics settings, as well as some slowdowns between missions that can only be fixed by restarting the game.

With all that said, I imagine fledgling developer Complex Games will patch these issues up sooner rather than later. It would be foolishness bordering on heresy if it didn't, because it's created a bit of a gem here – one that smashes through its safe pre-release image as 'Warhammer 40K meets *XCOM*' to plant the seeds for its own series. Likewise, it breaks away from the austere stylings of 40K with a vivid, meaty art style that makes corrupted levels and enemy units ooze with character (as well as plenty of pus and bile). Where *Daemonhunters* could so easily have been 'yet another 40K game' or 'yet another *XCOM*-like,' it emerges as one of the best offerings on both fronts. ■

PC GAMER

VERDICT

Chaos Gate – Daemonhunters is an engaging space opera that triumphs both on and off the battlefield.

87

SMASHING STUFF

Tearing down **TEARDOWN**'s voxelated worlds never gets old

By Nat Clayton

It would be so, so easy to write off *Teardown* as just a tech demo. A simple framework of maps, tools, and missions built to show off developer Dennis Gustaffson's incredible voxel destruction technology. But over its 18-month stretch in Early Access, *Teardown* has proven itself not only a stunning display of technical prowess, but also a bloody good little heist-'em-up, and the most creative sandbox platform since *Garry's Mod*.

Teardown is, first and foremost, all about that destruction. It's a game of wooden shacks, concrete walls, metal catwalks, and plaster corridors – all of which respond appropriately to being wailed on with a sledgehammer. Despite its blocky appearance, *Teardown*'s worlds break in wonderfully convincing ways. Metal pipes bend when supports are removed, while plaster walls chip away to expose sturdier brickwork, kicking up dust as they crumble.

Teardown's genius, however, is in how it brings method to this madness. The game's campaign tasks you with a series of destructive heists to pull off with a limited set of tools. You have unlimited hammer swings, sure, but that won't get you through

brick walls – and while you'll slowly unlock an array of blowtorches, shotguns, bombs, and rocket launchers, their uses are limited.

Early missions see you using these tools to carve a route through an empty map, speedrunning that course

to collect valuables before the alarm timer hits zero. It's a very simple kind of mission, but wonderfully satisfying in how it forces you to consider your carnage.

Teardown first launched with half of its campaign, and those early missions can feel a little bit samey. But as it made its way through Early Access, Gustaffson got more creative with the game's mission design, leading to a game that backloads its more interesting challenges to Act 2.

Modders have tinkered with the way things fundamentally break

NEED TO KNOW

WHAT IS IT?
A detailed voxel destruction engine framed by heist puzzles and sandbox carnage

EXPECT TO PAY
£18.50

DEVELOPER
Tuxedo Labs

PUBLISHER
In-house

REVIEWED ON
Nvidia RTX 2070, 16GB RAM, AMD Ryzen 5 3600

MULTIPLAYER
No

LINK
teardowngame.com

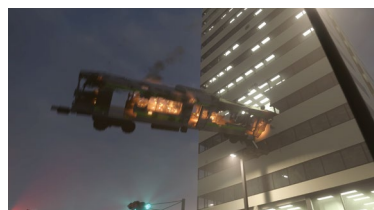
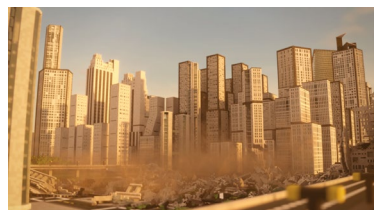
Suddenly you're dealing with car chases, tornados, and killer robots, and the spectacle of the destruction engine really comes into full force.

WRECKING CREW

As a campaign, *Teardown* is a fun experiment with plenty to prod at, framed by a light-hearted story about a contractor who keeps getting hired by the same feuding businessmen who, honestly, all kinda deserve to have their toys smashed. Chasing side-gigs and optional objectives gives you more cash to upgrade and unlock new tools, and more excuses to revisit demolition jobs you might have left unfinished.

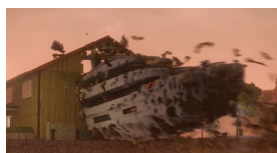
That said, the real, enduring lifeblood of *Teardown* can be found in its modding community, which has exploded since the game's Early Access debut. Tired of its nine maps? There are dozens, if not hundreds more on the Steam Workshop. A sledgehammer is fun, but why not go to town on these new wrecking spots with laser rifles, miniguns akimbo, or portable black holes?

Modders have even tinkered with the way things fundamentally break. *Teardown*'s destruction doesn't



ABOVE: Next stop, third floor.





TOP: The mall's having a fire sale.



ABOVE: Hard to port!

account for structural stability or tension, meaning entire buildings will often be held up by one voxel. Various modders have attempted different ways to remedy that, breaking objects in flight or chaining destruction to create more believable building collapses.

The only real shame is in *Teardown's* complete lack of multiplayer. While I can appreciate the programming nightmare that must come with trying to sync thousands of exploding voxels across multiple clients, it's all too easy to imagine the kinds of new, impromptu games that could spawn from *Teardown's* foundations.

Because those foundations really are incredible. *Teardown* isn't just a tech demo – it's a window into a world where game worlds only became more dynamic, more physical, more breakable. *Teardown* is a game that's excited about its own technology, and wants to show you all the ways it can break stuff.

It's a brilliant series of puzzles, a never-ending series of new worlds to break and new tools to break them with. But most of all, *Teardown* really is just a smashing great time. ■

PC GAMER VERDICT

Teardown is an endlessly delightful destruction sandbox that modders and I can't seem to get enough of.

90

Gmod-style physguns let you lift entire buildings.



TOOLS OF THE TRADE

No demolitions expert should leave home without these



SLEDGEHAMMER

No ammo. No fuss. Just a slab of rock on the end of a stick. If you need something smashed, this'll smash it no problem (as long as it's not brick or concrete).



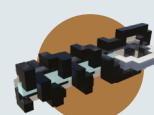
SHOTGUN

Think of it as a sledgehammer, but with range. Not the most precise tool, but if you need to smash a window in a hurry there's no better one.



ROCKET LAUNCHER

The rocket launcher is for those special occasions where you need to blow something up from half a mile away. Kaboom!



BXH-X42

Fine, this one's a mod. But sometimes you just truly need something erased from existence – and this handy, portable black hole launcher will do exactly that.

RELIABLE NARRATOR

Buckets of new features come to **THE STANLEY PARABLE: ULTRA DELUXE**

By Christopher Livingston

I've never given much thought to the 'skip dialogue' button in a videogame, but after playing *The Stanley Parable: Ultra Deluxe* I can't stop thinking about it. The button is just one of several new features explored in the "expanded reimagining" of 2013's *The Stanley Parable*, which once again turns the act of playing a game into a hilarious, surprising and thoughtful examination of games and game development, players and player choice, and yes, even simple buttons.

But what even is *Ultra Deluxe*? It's not just a remaster, though the original game has been faithfully rebuilt in Unity. You can play through it once again as office worker Stanley, who realises he's the only one in the building and sets out to discover why while a gentle storybook-style narration guides him through the empty corridors and rooms. Once again, the simple act of disobeying the narrator and making your own choices leads to numerous branching paths, a range of reactions from the narrator, multiple endings and the pure joy of doing something unexpected and discovering the game fully expected you to do it.

But at some point while replaying the new version of the old *The Stanley Parable*, the new content begins to intrude. It's not a subtle introduction – a door labelled New Content appears in the familiar office corridor you've walked down a dozen times already. Step through it and a bunch of new features are trotted out to you. Like a bucket that Stanley can pick up and carry around with him.

BUCKETS OF FUN

That's it. It's just a bucket, a little joke based on the idea that some players found the original game confusing, and so this Reassurance Bucket can now be carried around as a companion to stave off any feelings of discomfort or uncertainty. But of course, a simple joke in *Ultra Deluxe* never remains simple. When you're carrying the bucket the narration changes to reflect that, and once the

narrator began saying different things I started to wonder what else might be different while I was holding the bucket. What if I climbed out a window with the bucket, or took it into the closet, or took it to one of the game's many endings? What if I started over with the bucket and then brought the bucket back to the place where I originally was given the bucket? Could I get two buckets?

As always, developer Crows Crows has done a brilliant job anticipating anything and everything a player might think to do while

**I did,
eventually,
get my
Reassurance
Bucket back**

NEED TO KNOW

WHAT IS IT?
The Stanley Parable rebuilt in the Unity Engine, but with more of itself

EXPECT TO PAY
£20

DEVELOPER
Crows Crows Crows

PUBLISHER
In-house

REVIEWED ON
RTX 2080, Intel i7-9700K, 16GB RAM

MULTIPLAYER
No

LINK
stanleyparable.com

playing *The Stanley Parable*, including holding a bucket and plenty more, and the rewards for experimenting are more humour, confusion, and thoughtful explorations about game design and player choice.

And as silly as it sounds, at one point I decided I'd try to get rid of the bucket, a lengthy task that rewarded me with a Replacement Bucket, which I stubbornly also got rid of, after which I wound up with no bucket. And I'm embarrassed to say I genuinely felt a bit of panic. It couldn't be that I had become legitimately, emotionally attached to the bucket, could it? No, it was just that carrying the bucket had unlocked a number of new endings (and bucket-based revisions of the game's original endings) so I worried that without the bucket, I might wind up missing something. Some ending, some bit of narration, some silly or funny or thought-provoking moment that are the real collectibles of *The Stanley Parable* experience. I did, eventually, get my Reassurance Bucket back, and dammit, as stupid as it feels to say this, I felt reassured to once more be clutching it.

There's far more than just a bucket in *Ultra Deluxe*, by the way – I've played it for ten hours and I'm fairly sure I still haven't uncovered all its new tricks and treats. As with the original, there are a few patience-testing moments where the narration carries on just a bit too long and I found myself restless to keep poking around rather than standing in place listening. But mostly it's a delight, an adventure full of fun surprises, meta-humour, and commentary on games and how we play them. Certainly nothing a 'skip dialogue' button would improve. ■

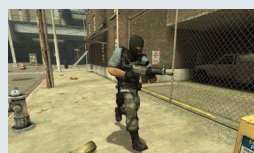
MOD SQUAD

Other mods that became standalone games



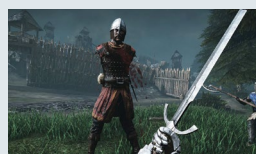
DAYZ

The game that inspired countless survival games began life as a mod for *ArmA 2*.



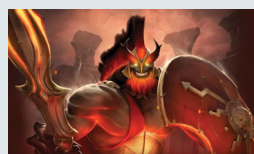
COUNTER-STRIKE

The game had humble beginnings as a mod for the original *Half-Life*, and quickly grew into a sensation.



CHIVALRY

The medieval multiplayer hack-and-slash game began as *Age of Chivalry*, a *Half-Life 2* mod.



DOTA 2

Valve's free-to-play MOBA's roots lie in a 2003 mod for Blizzard's *Warcraft III: Reign of Chaos*.

PC GAMER VERDICT

A delightful update that fills the original game with more humorous and thoughtful rabbit holes to get lost in.

88

Get ready for an entirely new button.

THE BUTTON THAT
SAYS THE NAME
OF THE PLAYER THAT IS
PLAYING THE GAME

TRY IT
HERE!



FAR LEFT: What does time mean, anyway?

LEFT: No expense was spared.



You can still play the original with the same old Stanley.

AVALON CALLING

Is **KING ARTHUR: KNIGHT'S TALE** the Holy Grail or a wholly fail?

By Matt Killeen

There's no canon version of the Arthurian legend, and as such it's fertile ground for reinterpretation. From Thomas Malory's *Le Morte d'Arthur* to T H White's *The Once and Future King*, or from Frank Miller's *Cursed* to John Boorman's gorgeous but somewhat flawed *Excalibur*, everyone has their own notion of what it is and what it represents. In my case, it was a lifelong thing for Cherie Lunghi.

King Arthur: Knight's Tale sidesteps much of this by picking up where NeocoreGame's 2009 dark fantasy *King Arthur – The Role-playing Wargame* left off, and where most retellings stop. Arthur and Mordred have killed each other at the Battle of Camlann, and the Lady of the Lake has taken Arthur's body to Avalon.

The Lady awakens the deceased Mordred on the legendary island, which is a kind of purgatorial upside-down of the real Britannia, to save the world. Your mission: to reconstruct Camelot, reassemble the Round Table, and go after Arthur, who has become an undead monster.

The game is a party-based RPG with turn-based tactical combat along the lines of *XCOM*, *Darkest Dungeon* and *Divinity*, taking mechanics from each. This makes it very familiar territory. It can also be a roguelite, depending on your chosen difficulty level, with save-free permadeath available for the masochists out there.

The mission structure is simple. Assemble your team from the

available knights and follow the prompts as you explore each environment. You return with loot, XP, and often a new knight for your Round Table. When a fight occurs, you spend your action points to move, fight, and cast spells until the enemy is vanquished. That might feel a little basic, but the balance of armour, hit points and vitality – health that does not regenerate during the

mission – demands a touch of subtlety, rather than just charging in to hack and slash. Each party of knights needs to be balanced and play to its strengths, with each class – the axe-wielding Champion, the tank-like Defender, the sneaky Vanguard, the supporting Sage, plus ranged weapon heroes, the Marksman and the Arcanist – fulfilling easily identifiable roles. They work as a team and will end up covering for the wounded members.

FOR THE GUIN

That combat is satisfying, with a nice juicy feel and satisfying set of noises,

Each party of knights needs to be balanced and play to its strengths

NEED TO KNOW

WHAT IS IT?
Turn-based dark fantasy RPG with roguelite elements

EXPECT TO PAY
From £32

DEVELOPER
NeocoreGames

PUBLISHER
In-house

REVIEWED ON
GTX 980 Ti, Intel i5-4690K, 32GB RAM

MULTIPLAYER
No
LINK
neocoregames.com/en/games/king-arthur-knights-tale

all without undue gibbing and blood, and is challenging enough without being pointlessly frustrating. You can move the camera freely, allowing you to see the battleground from all angles, and the campfires and shrines to restore HP or armour are on the right side of generous.

I'm not as experienced as some in this genre, but I figured most things out, even without the few cursory in-game pointers that dried up almost immediately. I did eventually discover the tutorials in the menus, but not before I'd gone online looking for advice on the complex mechanics. I couldn't get the hang of *Overwatch* at first, but there were always other ways to rout the enemy, as long as you remember to face them. The Backstab modifier is a killer.

The game started awkwardly, then rapidly improved once the formal mission structure established itself, especially once I stopped paying attention to the story. When I did, a well-structured and finely balanced combat game appeared. The challenge ramped up smoothly, with plenty of tension and clever problem-solving, without ever feeling unfair.

But eventually the maps grew tiresomely samey – the same woods, the same dungeons and the same ruins. You spend too long wandering round confusing landscapes, with your team running behind you like a grimdark *Benny Hill* show. This might be forgivable if they were procedurally generated, but someone created all this and presumably watched a playtester struggle. Turning the camera is all very well, but without a compass it's easy to get lost. Likewise, it's too easy to wander back into a fight you've seen and are avoiding while looking for a campfire. That's not a challenge, it's a pain.

That dichotomy is everywhere. The atmosphere is gloomy and melancholic, or, being uncharitable, it's relentlessly grey and dull. The fancy mist effects obscure paths and combat squares in a way that's not

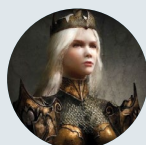
CRONE, MOTHER OR MAIDEN? The women of Avalon and their tropes



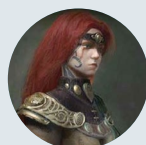
LADY DINDRAINE
Sensible hair.
Christian Union type.



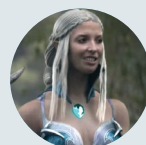
LADY GUINEVERE
Surprisingly, not to
blame this time.



LADY MORGAWSE
Bad mum. Helen
Mirren energy.

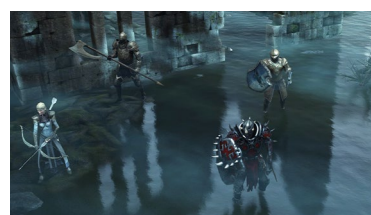
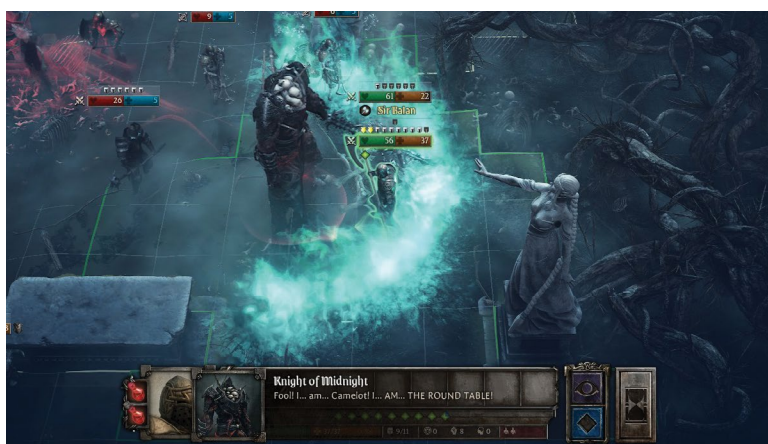
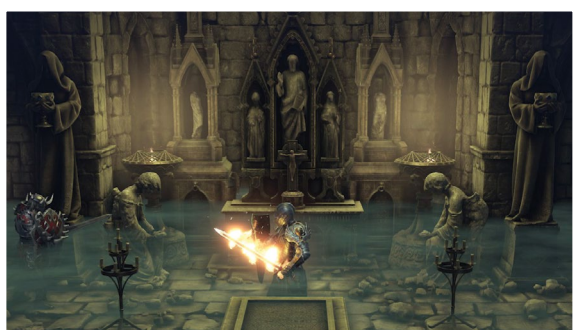
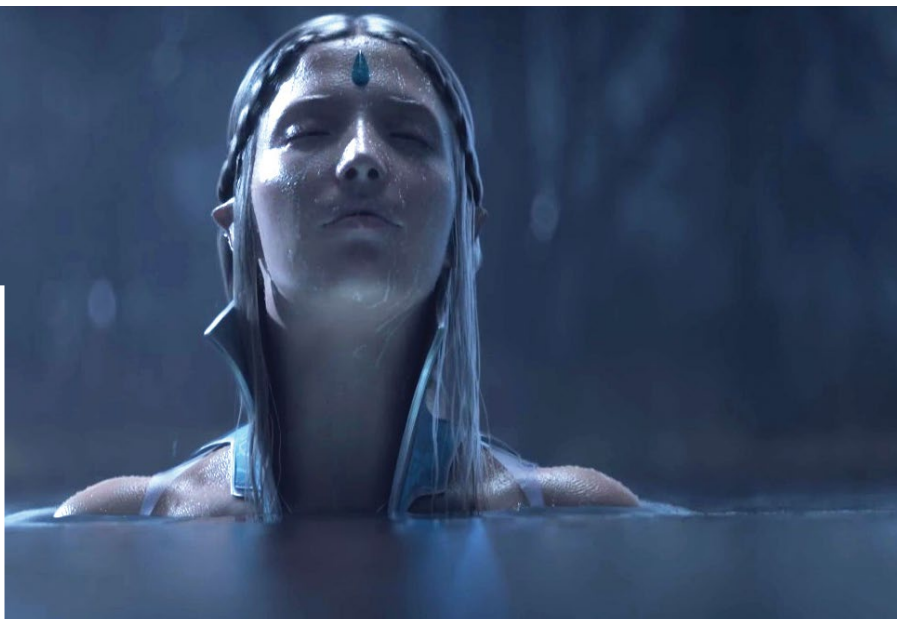


LADY BOUDICEA
Wild redhead.
Revenge backstory.



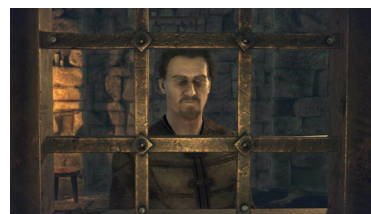
LADY OF THE LAKE
Dressed in lingerie.
Not to be trusted.

It's not Arthurian
without a wet spirit.



FAR LEFT: Who's the best king? Only one way to find out...

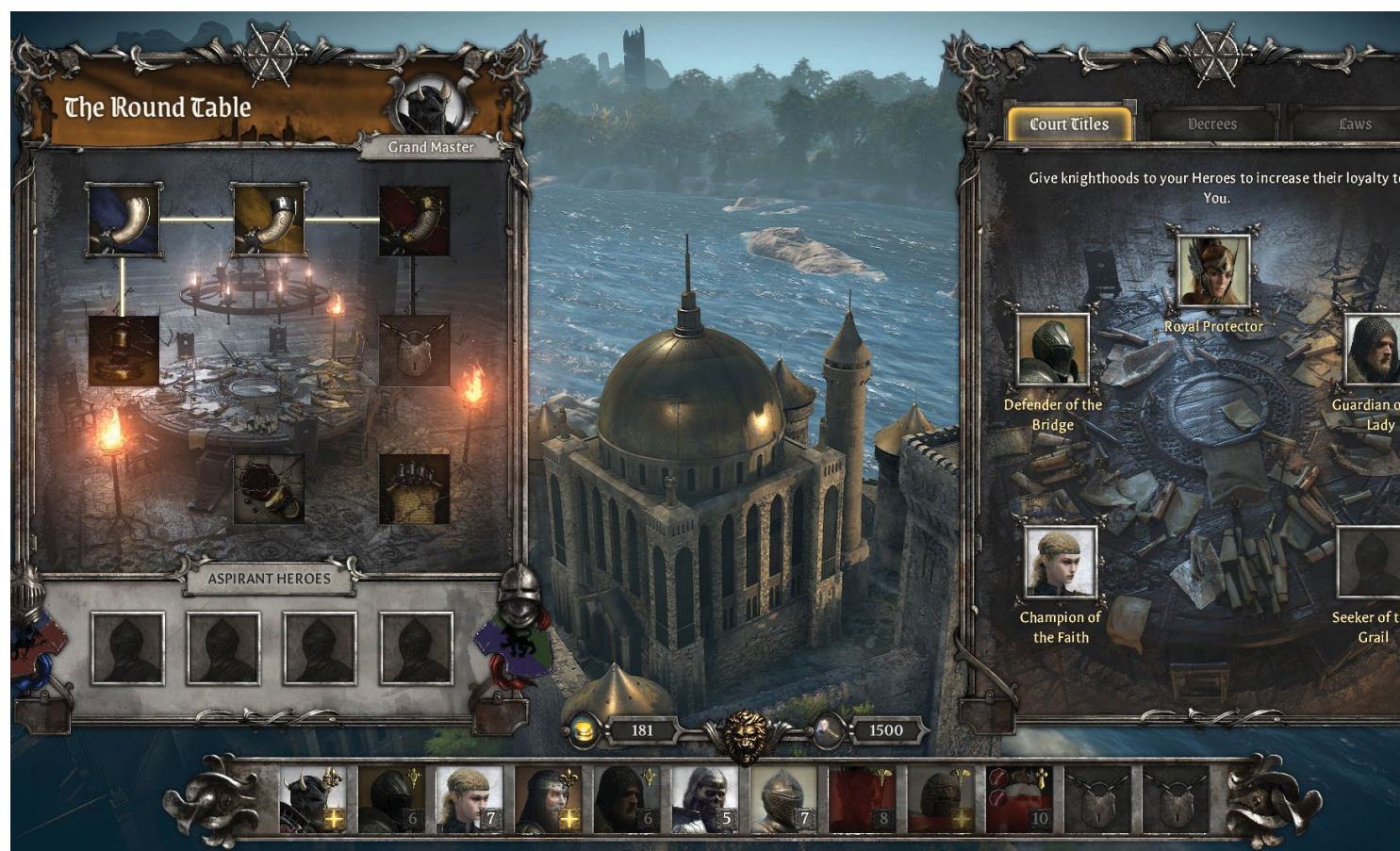
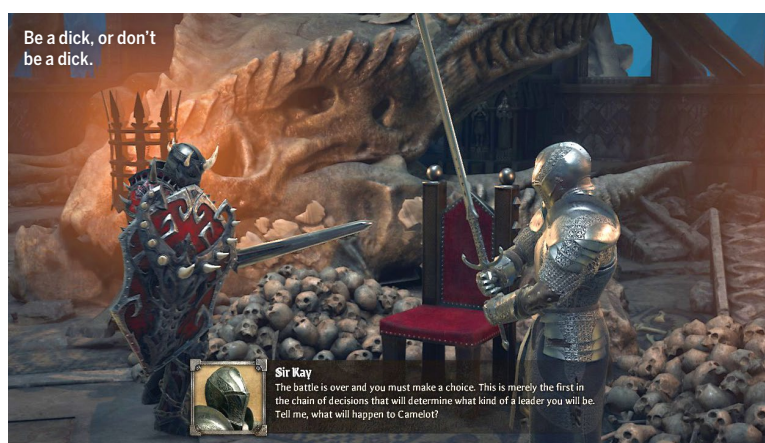
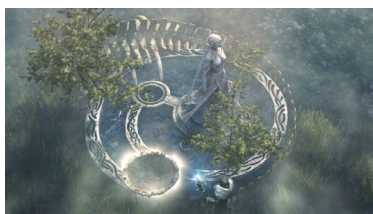
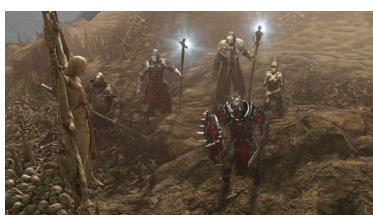
BELOW: It's dark, you see.





ABOVE: Mordred does wicked side-eye.

BELOW: Keeping everyone onside is surprisingly easy.



much fun, but it does look nice. Also, like every turn-based combat game I've ever played, it needs an undo command, as it's too easy to move the wrong character to the wrong place and squander your action points. Likewise, forgetting to bring potions before you set out is usually fatal and losing your progress to get back to the merchant is just annoying.

Camelot itself is

better organised.

Levelling up and distributing loot is a breeze. For those who obsess about modifiers, there's numbers aplenty, but the amulets, trinkets, armour, and weapons follow the traditional 'white, green, blue, purple, orange' system which made it easy to sort and assign. You spend your gold rebuilding the castle and sending your wounded or exhausted knights to the hospice or cathedral for treatment. I think I was supposed to worry about knightly loyalty and distributing rewards and titles, to keep everyone on side, but that seemed to take care of itself. Nobody left before I filled the Round Table anyway, and even death is not the end. There's a chance at resurrection from the crypt if you find the right scrolls.

A LANCELOT OF DATA

King Arthur: Knight's Tale was a successful Kickstarter and spent a year in Early Access, so it's disappointing that version 1.0 is poorly optimised. The huge 121GB download rivals *CoD* and *Hitman* for size, and for those using small SSDs it requires drive management that isn't really justified. At launch it was also more than a little laggy and liable to crash, which is a particularly

significant issue for those playing save-less at the highest difficulty. I had problems with my monitor setup and had to play in a window at 1080p, with my mouse leaking off the edge of the screen and messing things up. Things have definitely improved as I've worked my way through it, and the developer is responding to bug reports, so there's cause for optimism.

As I write this review to a deadline, I'm itching to get back to it

However, my biggest issue with the game is its reductive interpretation of dark fantasy and grimdark. The whole thing is utterly and unrelentingly miserable, with no

pinprick of light, or the sliver of hope that makes the endeavour feel a bit more worthwhile.

It lacks the subtle wit and edge of *Warhammer*, or the contrasting emotional shades of, say, *Game of Thrones*. The story is uninspired, the dialogue infantile or over-written nonsense. The voice acting is pedestrian at best, and amateur, grizzled, cardboard at its worst. A lot of the accents are all over the place, and the game's efforts at levity fall flat. Meanwhile, the characters are one-dimensional vessels, or simply objectionable. It's not possible to identify or sympathise with them, except in the narrowest sense of a consequence-free power-fantasy. I don't benefit from reflected glory, the way I can in the *Souls* games, for example. Here, I just don't care about anyone.

GLASS ARTH' FULL

Mordred's progress on his quest is obvious and engaging. It's not clear what he is really achieving, or even whether he should be doing it.

Everyone is already dead for a start. How much worse can it be? As for those big moral decisions, you might as well toss a coin. I didn't trust anyone, so my choices were mostly utilitarian. Who do I need? How do I avoid this fight? I'm usually Lawful Good, but my 'Rightful' decisions and dialogue choices didn't really change anything meaningful.

Yet... the gameplay loop proves surprisingly effective, even as it became increasingly repetitive. By ignoring the story, the landscape, the irritating niggles and the less developed side mechanics which took care of themselves, I started to enjoy it. Then it went beyond satisfying and became needful. In short order, I became enraptured by it. I demanded satiation. To eliminate a screenful of baddies – some of whom return to life or heal themselves or otherwise cheat – was meat and drink that I found myself craving again an instant later.

Clawing your way out of a level with a vital team member only just alive, thanks to your squad of walking wounded, feels heroic. To come away with the prize is thrilling. It doesn't matter what it is. It'll be some unobtainium-coated MacGuffin. Who cares? I need it to go and hit something squishy with a metal stick. I lay awake in the depths of the night, plotting the perfect set of moves, and had to stop myself getting up to try them out. As I write this review to a deadline, I'm itching to get back to it.

In this, *King Arthur: Knight's Tale* succeeds despite itself. I won't be telling stories about my adventures to my friends, or buying a T-shirt, or quoting bits of it out of context, but that doesn't mean I won't keep enjoying its tactical tussles.

It is a shame that the game uses brutish grime in place of real depth – it feels unnecessary, and perhaps damning of an industry that often doesn't care enough about story and characterisation. It leaves me with mixed feelings on the overall game – part of me is really put off, but another part of me is going to make me go boot it up again the second I finish this paragraph. I've got endgame sidequests to do. ■

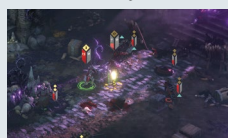
BATTLE ROYALE

Knight's Tale is far from the only Arthurian game



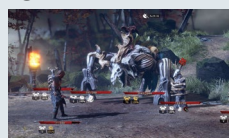
PENDRAGON

A narrative strategy game from the creators of *Heaven's Vault*, *Pendragon* lets your choices change the fates of Arthurian characters.



THE HAND OF MERLIN

A tactical turn-based roguelike, currently in Early Access, which puts you in the shoes of a dimension-hopping incarnation of Merlin.



TAINTED GRAIL: CONQUEST

Loosely based on a board game, this deck-building roguelike recasts Avalon as a kind of apocalyptic purgatory.



PC GAMER

VERDICT

King Arthur: Knight's Tale is a strong turn-based RPG, but rough around the edges with an unpleasant story.

70

FAMILY VALUES

ROGUE LEGACY 2 joins its forebear in the roguelite hall of fame

By Anne-Marie Ostler

Back in 2013, the original *Rogue Legacy* won the hearts of many a roguelite fan, with a twist on the genre that saw failure go hand-in-hand with progress. And nearly a decade on, Cellar Door Games faces not only the weight of expectation that comes with creating a sequel, but competition from an army of titles inspired by its formula. Far from buckling under the pressure, the dev has crafted a follow-up that revitalises the series with fresh ideas.

Once again, you step into the shoes of a randomised hero tasked with navigating the levels of a procedurally generated castle. Said castle is a gruelling gauntlet teeming with tough enemies to defeat, tricky obstacles to overcome, and valuable gold to steal. If, or more likely, when your hero reaches the bottom of their health bar, you'll swiftly find yourself in the footwear of their descendant.

At the start of each run, you're given a choice of three characters from an array of unlockable classes. Old favourites such as the Knight and Barbarian are mixed with exciting new options like the Gunslinger and Valkyrie. Classes now come with their own unique stats, weapons, talents, and passive abilities, making each feel distinctly different from the last. One of the most unusual and enjoyable new additions is the Chef class. Not only can they cook up a mean stew to replenish their health, but their trusty frying pan can inflict burn damage as well as deflect incoming projectiles like a deadly game of ping pong. However, some classes are considerably more effective than others, and I found myself passing up the less useful ones after giving them a few tries. For example, a lack of multidirectional aiming for spells meant the mage class sat on the bench for most of my time with *Rogue Legacy 2*.

Threatening you along your journey is a relentless horde of enemies. Some fill the screen with deadly projectiles, while others want nothing more than to whack you

with a powerful melee strike. Enemies aren't your only worry; levels are a platforming labyrinth, filled with hazardous obstacles like spiked pits and flaming traps which require careful timing and patience to overcome. It's fast-paced and incredibly fun, and despite being bested many times, I couldn't wait to jump back in for another go.

The most significant addition to *Rogue Legacy 2*'s family-orientated antics is the heirlooms. Once obtained, these helpful trinkets unlock traversal

The varied mechanics mean that grinding never feels like a slog

NEED TO KNOW

WHAT IS IT?
A cheerful and challenging dungeon crawler where death is a good thing.

EXPECT TO PAY
£22

DEVELOPER
Cellar Door Games

PUBLISHER
In-house

REVIEWED ON
Intel Core i7-11700K,
GeForce RTX 3070,
16GB RAM

MULTIPLAYER
No

LINK
roguelegacy2.com

abilities, including a double jump and an aerial dash that allow you to reach new locations. As well as adding a delightful metroidvania element to the game, this expanded moveset gives you more evasive options when it comes to avoiding damage from enemies and other dangers.

GENERATION KILL

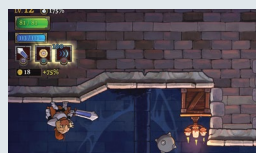
Roguelites, by their nature, involve a lot of repetition, but *Rogue Legacy 2* goes to impressive lengths to ensure that it never feels like a slog. The upgrade system offers numerous and varied enhancements that add more than mere buffs to your stats. Your hard-earned gold can also be spent unlocking new classes, merchants, and game-altering upgrades such as the Architect and an adoption centre. Eager to see what interesting new upgrades were available, I was often strangely excited at the prospect of my hero's demise.

Rogue Legacy 2 doesn't deviate hugely from the genre's well-worn formula, but it does what every good roguelite should: entice you back for more. You'll settle in for just one run, and find that you're unable to put down the controller when met with the all too familiar death screen. Instead, you choose yet another heir, promising yourself that, this time, you'll conquer the castle.

Cellar Door Games' latest stands among the finest in a genre it helped define. The demanding yet endlessly entertaining gameplay, fuelled by a rewarding progression system, is as absorbing as it was the first time around. While the enhanced visuals, bolstered character options, and delightful traversal abilities make for a sequel that not only lives up to its predecessor, but easily surpasses it. ■

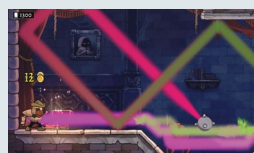
HEIRY SITUATION

Traits that'll spice up your adventure



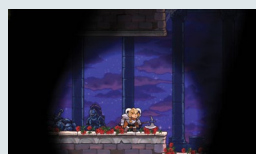
VERTIGO

Having a hero with this trait literally turns your adventure on its head.



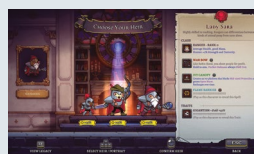
SYNESTHESIA

Bored of bland rooms? Leave a dazzling trail of colour everywhere you go.



DIVA

Unleash your star power with a spotlight that darkens everything but you.



GIGANTISM

Gain massive size and reach but also become a much bigger target for enemies.

PC GAMER VERDICT

This sequel is a sublime addition to the *Rogue Legacy* family and one of the best roguelites I've played so far.

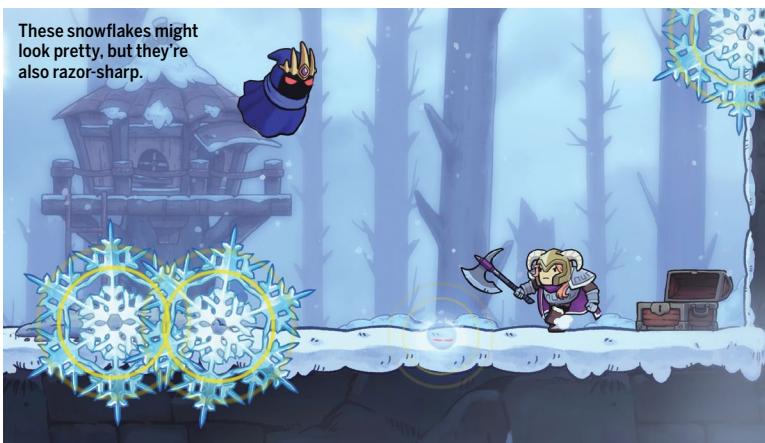
88



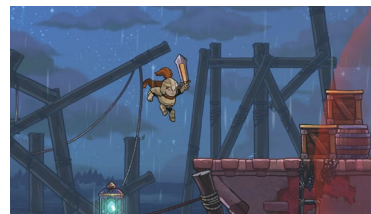
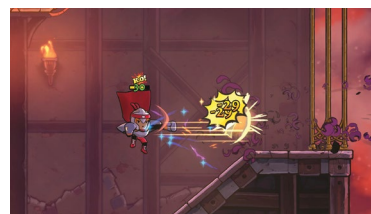
ABOVE: Spin kicking a lantern lets you soar to new heights.



LEFT: The boxer's rapid punches make this class a real knockout.



These snowflakes might look pretty, but they're also razor-sharp.



REQUIRES
AETHER'S WINGS

Later levels are
inaccessible until you've
got the necessary gear.

RIDE ON TIME

MOTOGP 22 looks back at an historic season in style

By Phil Iwaniuk

Modern MotoGP is in a golden era. 2021 saw eight different winners across 18 races, and so far this season we've had three different riders on the top step in four races, including two taking their maiden victories. It's unpredictable, packed with talent and spectacle, and guaranteed entertainment every race. Naturally, then, the focus of Milestone's licensed bike sim *MotoGP 22* is the 2009 season.

An all-new mode, titled Nine: Season 2009, takes you back to a bygone era when Rossi, Lorenzo, Stoner, and Pedrosa jostled their 1,000cc machines around each other for the wins, by way of a documentary-style video series directed and narrated by filmmaker Mark Neale, and a series of challenges intertwined between them.

The challenges are straightforward, the objectives always focusing on either overtaking or gapping opponents. But you're right there, among a full grid of 2009 riders, listening to a classic inline four screaming its lungs out and looking for a gap between Rossi's knee and the apex. Truthfully, for those with even a passing interest in the sport, that's really enough.

Milestone has addressed the braking difficulty this year

That's not to say Milestone shirks any responsibility in simulating the current season. As ever, all three categories of racing are present, correct and resplendent in 2022 liveries. And as ever, that lends a depth to its career mode that not even

Codies' *F1* games can quite match. When you finally move up to the premier class you feel like you earned it, like there's a story to how you got here. It remains the biggest pull of the series, even with the inclusion of the 2009

season playable doc this year.

Mastering the bikes, meanwhile, is a little easier. Last year's title veered so far off into hardcore sim territory that even months after release I was still routinely outbraking myself, tucking the front, and squirming

NEED TO KNOW

WHAT IS IT?
The latest officially licensed MotoGP racing sim.

EXPECT TO PAY
£40

DEVELOPER
Milestone Interactive

PUBLISHER
In-house

REVIEWED ON
i7 9700K, RTX 2080 TI, 16GB RAM Windows 10

MULTIPLAYER
Yes
LINK
motogpvideogame.com

around in braking zones like those inflatable men they put outside car dealerships. I wasn't alone. Milestone has addressed the braking difficulty this year, but not in a manner that feels particularly satisfying.

Essentially there are just extra levels of assist now. Before you either admitted defeat, turned on combined braking, and got on with it, or persevered with committing an impossibly deft series of inputs to memory. Now there are additional options to modulate your inputs, the upshot of which makes the handling more forgiving at the cost of control. Turn on the modulation and you simply can't lean in rashly enough to tuck the front, which saves you a crash but also feels a bit too much like an autopilot mode.

New assists aside, wrestling a bike around a circuit still feels extremely challenging, and with ride height devices to play with now along the straights, there's an extra wrinkle to mastering the controls. It's not completely convincing – ride over a bumpy apex, watch the insane Buckaroo ride that occurs in its aftermath, and the illusion of simulation is shattered – but it feels



ABOVE: Manual race starts are a bit easier this year, and now feature holeshot devices.



Ennea 'The Beast' Bastianini. Are we looking at the next world champion?



TOP: The sense of speed is, as ever, absolutely spot on.

ABOVE: Dani Pedrosa, bravely pushing past his injuries to take the chequered flag.

FAR RIGHT: Despite Binder's fury, photobombing is allowed and thus Rins faces no penalty.



amazing to get the point of tipping the bike in *just right* and make the apex, carrying a ton of corner speed and gliding past an opponent. In those moments, all is forgiven.

ON YOUR BIKE

Harder to turn a blind eye to, though, are some irritations that really should have been fixed by now. The ideal line assist is often totally off with its recommended braking points, and AI is inconsistent in pace from track to track, as though it's adhering to poorer lines on some circuits.

It makes inroads, then, this new *MotoGP* title. It's still feeling a little wobbly in the hands, as though the controls and physics model haven't yet been perfectly synchronised, and the AI and assists need more work. But Mark Neale's work really elevates the experience, creating a new mode that sets the mind racing with ideas for more like it. How about one that recreates each of the last ten race winner's maiden victories? Who wouldn't want to be put on Binder's KTM in a sodden RedBull Ring, or Bagnaia's Ducati, fending off Marquez around Aragon? There's a lot of tread on these tires. ■

PC GAMER **VERDICT**

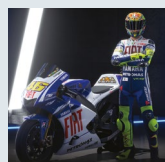
A doc format worth expanding and repeating, more assists, same rough but rewarding superbike racing.

76



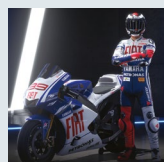
NINE LIVES

The big players in MotoGP's quasi-documentary



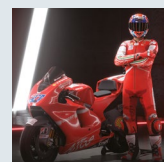
VALENTINO ROSSI

At the time an eight-time champ who'd just returned to winning ways after Hayden and Stoner won in '06 and '07.



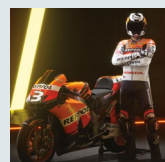
JORGE LORENZO

So good in his debut Yamaha season that Rossi had a wall built between them in the pits. 2009 was war between the teammates.



CASEY STONER

The Ducati rider won the championship in 2007, then Rossi found a way to beat him to the '08 title. It was everything to play for in 2009.



DANI PEDROSA

The Spaniard dominated 125s and 250s, but battled injuries throughout his MotoGP time, and was looking to step up in '09.

MOSTLY HARMLESS

You may need a Babel Fish in your ear to understand **GALACTIC CIVILIZATIONS IV**

By Rick Lane

This latest sequel in the long-running strategy series bills itself as the most accessible entry yet. This is true, in the same way that the tail is the most accessible part of a tiger. Stardock's long running 4X series officially has a tutorial now, in the form of a little robot helper accursedly nicknamed 'Space Clippy'. But Space Clippy doesn't help much when a game explains everything as if it's arrived from another dimension.

Take modules as an example. What are modules, you ask? Well, so did I. At first I thought modules were optional extras you could select to tailor your starbases (which act as both resource harvesters and deployable control points, with modules helping improve those functions in various ways). But then I ran out of modules, whereupon I realised they are in fact a consumable resource. Yet unlike almost every other resource in the game, which are either harvested in space or produced on planets, modules are constructed at shipyards. Oh, and you can only construct modules once you've researched the relevant technology, itself an issue for reasons I'll get into later.

As with many other systems, *GalCiv* never properly explains any of this. Space Clippy just points you to various menus like a dismissive waiter in an alien restaurant. The irony is *GalCiv IV* is not as obtuse as it seems. It's just terrible at communicating, which means that enjoying the game at its best involves a lot of false starts.

This isn't merely about understanding individual systems: it's also about how key features are presented. Take the game's biggest new idea: sectors. Rather than display its universe as one vast expanse of stars, *GalCiv IV* splits the cosmos into self-contained bubbles, connected to one another by subspace warps (aka space roads). You can play on randomly generated

GalCiv IV introduces a new victory condition called Prestige

NEED TO KNOW

WHAT IS IT?
A colourful and intimidatingly deep space 4X game.

EXPECT TO PAY
£40

DEVELOPER
Stardock

PUBLISHER
In-house

REVIEWED ON
AMD Ryzen 5 3600,
GeForce RTX 2080
Super, 32GB RAM

MULTIPLAYER
Yes

LINK
galciv4.com

maps with around a dozen of these bubbles, each of which has roughly 30 stars in it.

This lets Stardock proclaim *GalCiv IV* to be the largest game in the series ever. Yet while visually impressive, playing at this scale isn't all that fun. 'Galactic'-size games are painfully slow, while ship management becomes extremely fiddly as you're constantly having to zoom in and out to issue orders to individual fleets.

SPACE IS BIG

GalCiv is more fun on smaller maps. Not only does the game move faster, with empires forced to rub shoulders more, but the strategic importance of sectors becomes more acute, as those space roads connecting them turn into highways that can be monitored (although not completely blockaded) to help defend your empire.

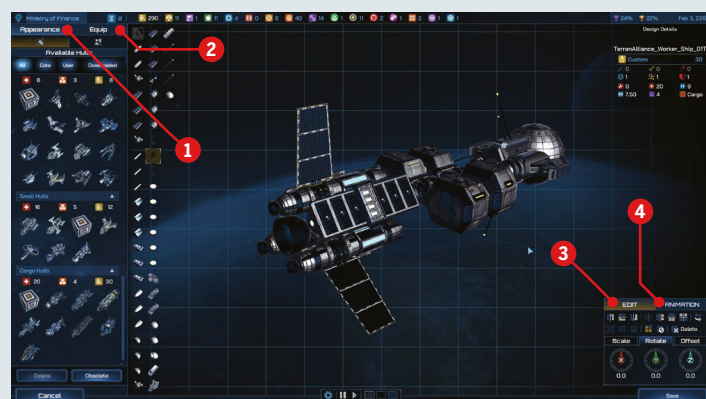
Not that keeping invaders out will guarantee victory. *GalCiv IV* introduces a new victory condition called Prestige. This tracks how awesome your empire is in a wide range of categories, awarding you prestige points to reflect how good your military or research or tourism industry is. Gain sufficient prestige points, and you win the game.

This helps facilitate non-violent victories and prevents larger-scale maps from descending into wars of attrition. You can also gain prestige bonuses by completing a range of quests that replace the standard campaign of previous games, unlocking as your civilisation meets certain criteria. This lets you experience the 'story' of *GalCiv IV* without being forced to play as a specific faction.

Those welcome additions are accompanied by the distinction between colonies and core worlds. Core worlds are planets managed by you directly. You assign a governor to them, construct productivity-boosting buildings on them, and have the option to build a starbase nearby.

SHIP SHAPE

GalCiv's 4's ship designer offers extensive customisation for your spacecraft



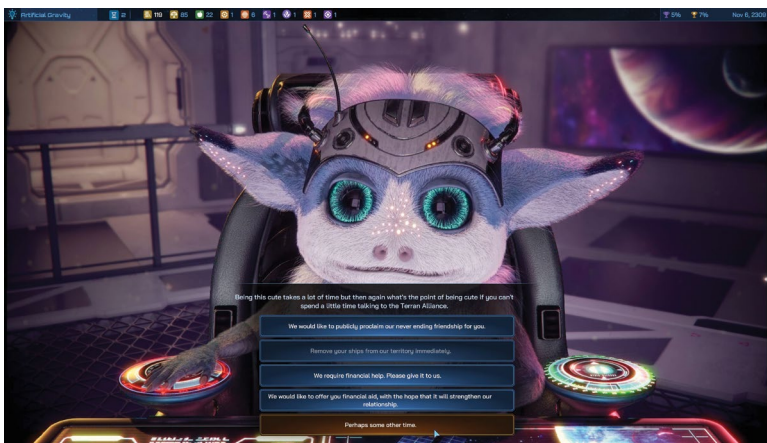
1 APPEARANCE
Lets you pick from ship presets or individual parts.

2 EQUIP
Allows you to choose thruster-type, weapons and so on.

3 EDIT
Allows you to adjust the scale, position, and shape of individual ship parts.

4 ANIMATION
Enables adjustment of elements such as rotating sections on the ship.

Resources are harvested via starbases.

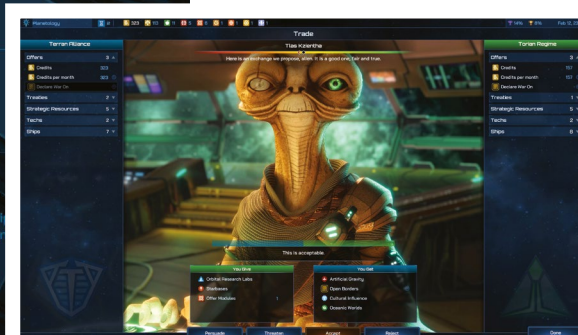
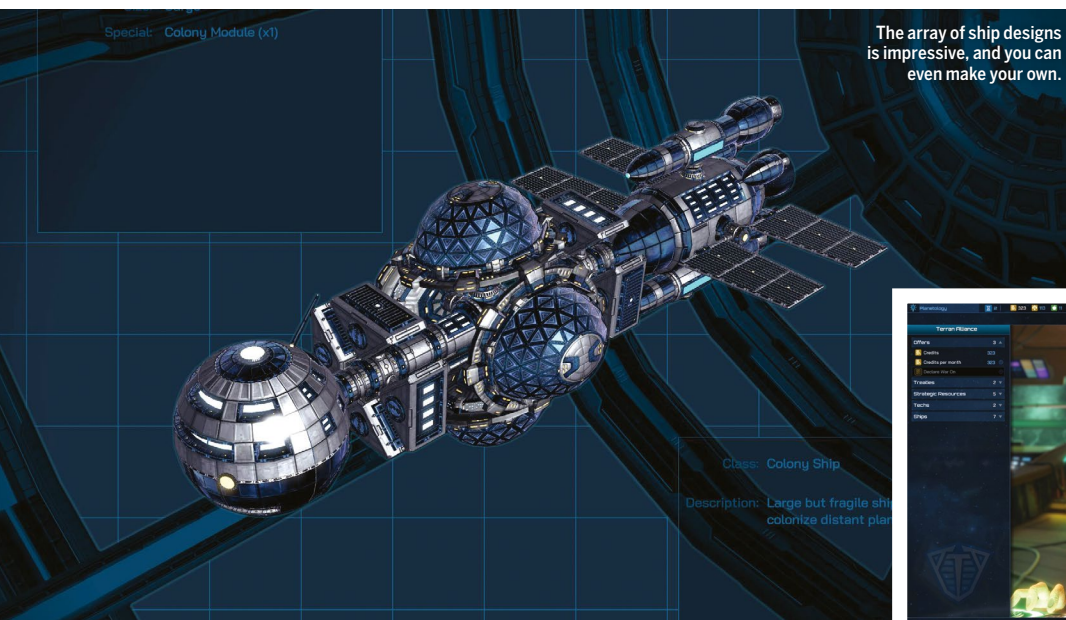


FAR LEFT: Just don't call it a Furby.

LEFT: Core worlds can be improved with buildings.

BELOW: Colonies can be sieged with a single starfighter, which is a bit silly.

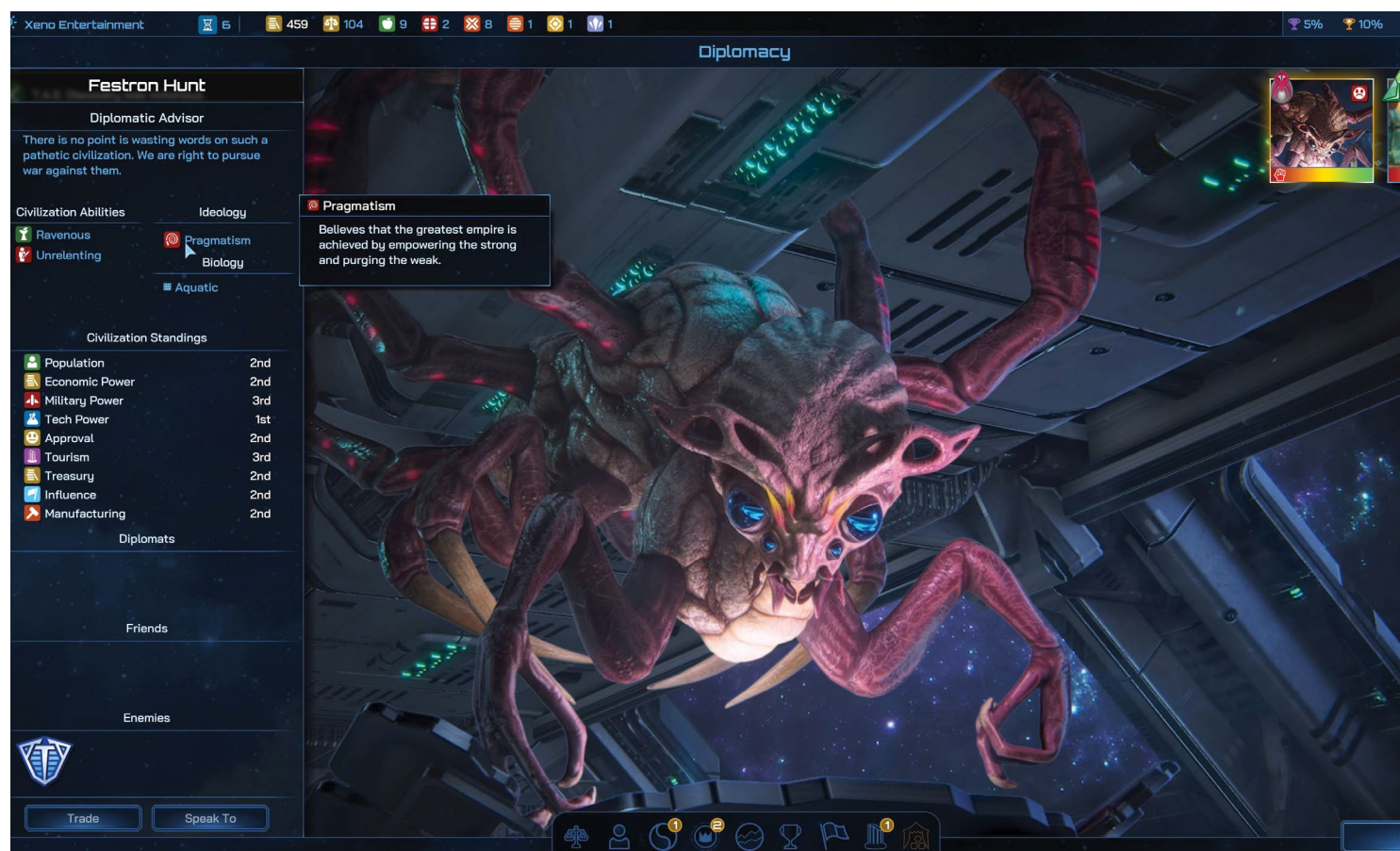




RIGHT: Unlike *Crusader Kings*, decisions rarely have follow-up consequences.

FAR RIGHT: Your circle of influence expands over time.

BELOW: "Hi, I'm the Festron Hunt. You might remember me from such films as John Carpenter's *The Thing*."



❖ Colonies, on the other hand, require no direct management, simply funnelling their resources to the nearest core world.

The idea is to reduce your management duties from upward of a hundred planets to perhaps a dozen or two. And it works – or at least, it does once you've figured out how to effectively differentiate between colonies and core worlds. A colony becomes a core world when you assign a governor to it, so functionally it's up to you to decide. But only worlds with Excellent ratings or above are worth turning into core worlds. Since the game doesn't tell you this, it's easy to rush into colonising a bunch of barely habitable backwaters while the AI nicks all the good planets from under your nose, snout, or proboscis.

The 'proper' way to establish core worlds is slow and involved, and you may find yourself more inclined to direct intervention. Conquering other empires is mechanically straightforward: you just click on a fleet or planet to attack it, then wait until the battle or siege is resolved. Again, though, *GalCiv IV* fails to mention that core worlds can only be conquered after researching a specific technology called Planetary Invasion. Colonies, on the other hand, can be snatched at any time with any ship, even a lone starfighter. If anything, this goes too far the other way, with wars descending into glorified pest control unless you ensure all colonies have a couple of ships stationed to defend them.

The 'proper' way to establish core worlds is slow and involved

Once you've parsed *GalCiv IV*'s garbled attempts to communicate with you, the universe feels sufficiently weird and ripe with possibility for a sprawling sci-fi sandbox. Not simply in the various races you encounter, which range from fleshly mantis-like creatures who thrive on oceanic worlds, to armies of sentient robots who don't

need food to survive, but also in the many anomalies that you can scan for minor rewards – such as ships you can patch up from wreck sites, or strange artefacts that provide you with useful one-off powers.

As your empire develops you'll unlock a range of 'executive orders', special edicts that can instantly recruit a new colony ship, boost your income, or reveal a new system on the map. In a game where progress is highly gradual, these quickfire bonuses offer a satisfying immediacy. In one instance I used an artefact to give a colony ship an extra move, helping it evade a fleet of pirates and beat a rival vessel to the best planet in the sector.

DEEP THOUGHT

As the game unfolds, your avenues of approach become more varied. Diplomacy, for example, initially seems limited, and it's difficult to get anything resembling a decent deal from other factions. As you gain access to better diplomacy tech your options for forming different relationships and alliances expand considerably. There are still issues though, like enemies who sue for

peace during a war while refusing to offer any incentives for you to stop. Indeed, while most of *GalCiv IV*'s 'problems' stem from poor onboarding, there are a few other black holes visible amid the background glow of competence. By far the biggest of these is how the game approaches research.

GalCiv IV's tech tree is more of a tech arboretum, so to make decisions easier, the game presents you with several new techs, pruned semi-randomly from the tree, to pick from as your next research project. This works fine until you actively want to pursue a specific tech, like, say, the Planetary Invasion system I mentioned earlier, which is an important mechanic to leave to the whims of chance. You can trade tech with other races – which is how I eventually got it – but they have to be willing to trade it with you, a situation by no means guaranteed.

SO LONG...

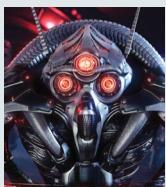
More broadly, *GalCiv IV* doesn't have much of a hook compared to other space 4X games. There's little here you haven't seen done better in, say, *Stellaris*, such as the nuggets of narrative tied to anomalies. Other new features, such as the *Crusader Kings*-style relationship you have with Governors and Citizens, are highly simplistic, basically meaning that a planet might abandon you for another faction if you let the Governor's opinion of you drop too low. The ship editor is nice, going well with *GalCiv IV*'s general visual snazziness. But it's very much an auxiliary feature, with little meaningful impact on the main game.

Galactic Civilizations IV is like an ancient alien race awakening to find a bunch of pioneering little upstarts have hit the scene, all buzzing around with their hot new spaceships and innovative ideas. Its response to this is to go big, but it's also broad and conservative. Space Clippy represents a token effort to make contact, but *GalCiv IV* ultimately doesn't really care if the message is understood.

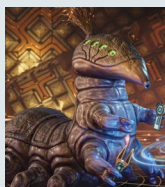
But then it's got a legacy spanning decades. It doesn't need your approval. It's *GalCiv*. ■

FACTION REACTION

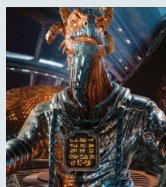
A quick guide to some of the weirdest factions



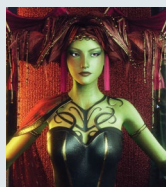
YOR SINGULARITY
An entirely synthetic race that doesn't eat food and doesn't care about approval. Ideal for new players.



NAVIGATORS
Navigators excel at science and exploration, but are less good when it comes to fighting and diplomacy.



DRATH
Tough looking dragon-people. The more money they have, the happier their citizens are. Sounds about right.



XELOXI
The Xeloxi Civilization is comprised entirely of criminals, which seems a bit prejudiced, really.

PC GAMER VERDICT

A vast and dependable grand space strategy. But there's little here that's radical, and expect to meet it halfway.

68

SWEENEY SHOD

A nice concept with bad ingredients makes for a disappointing dish in **RAVENOUS DEVILS**

By Ben Tyrer

Taking inspiration from an unusual source, *Ravenous Devils* is a cooking strategy game with a twist – the meat you use comes from the people you kill. However, it's so keen for you to get the joke that there's a reference to a barber in the opening. So just in case it wasn't clear, this is Sweeney Todd: The Game. Sadly, the promise this concept inspires is fleeting, as you discover that running a capitalist cannibal empire is surprisingly dreary.

Setting up shop in an appropriately squalid building, the murderous couple at the centre of this is Percival and Hildred. Percival, a tailor instead of a barber, spends his day selling clothes and murdering his clients. Hildred runs the pub underneath, using the bodies Percival sends her way as the filling in the meals she makes. You manage their working day, with your attention split between the two equally.

Controlling them is straightforward, as you simply scroll up and down to see each floor of the building and then click on the object you want them to interact with, but the challenge theoretically comes from juggling their differing demands. Hildred might need you to deliver some fresh pies, while Percival needs a hand mopping up his latest murder mess. For a game with such ugly subject matter, it at least manages to conjure some effective visual touches, from the steam trails of freshly baked pies to the queasily vivid mutilations that Hildred performs when making steaks out of patrons. If only the attention to detail in these animations was matched in the rest of the game.

Ravenous Devils struggles to make anything engaging with this darkly appealing setup. For starters, there should be something taxing about dividing your attention between two businesses, but the tasks between them are so limited, you never feel under pressure. Percival's main jobs are to murder and make clothes – as well as getting the ability to grow

vegetables later on – while Hildred's focus is prepping and selling meals, with a smattering of different recipes that can be unlocked when you buy new equipment. What also makes the

strategy feel stale is that the flow of customers is pretty predictable, especially later on when I knew I would get three people a day to murder with Percival, making it easy to know when to divide my attention between

the pair, rather than feeling like I was making split-second judgements.

This absence of peril can be felt across the entire game. Because your

It struggles to make anything engaging with this darkly appealing setup

NEED TO KNOW

WHAT IS IT?

The answer to the question, "What if Sweeney Todd was a cooking game?"

EXPECT TO PAY

£4

DEVELOPER

Bad Vice Games

PUBLISHER

In-house

REVIEWED ON

Intel i5-4690K, GeForce GTX 970, 16Gb RAM, Installed on SSD

MULTIPLAYER

No

LINK

bit.ly/3kXSohp

day won't start until you actually open up the store, you can take as much time as you need to prepare, stocking up on everything you need and processing bodies away from the hustle and bustle of a regular day. You can even get a cat that will hunt rats for you if you're running low on meat to sell to customers. While the tasks you complete in this downtime won't completely get you set, it does feel like you're making an already gentle challenge even milder.

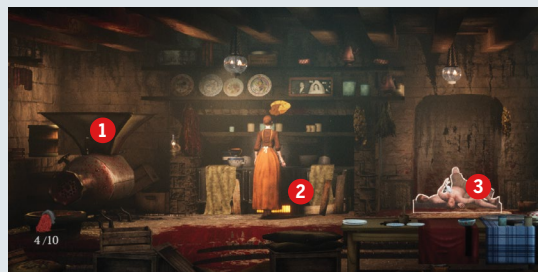
SHOP OF HORRORS

There's at least some intrigue with the upgrades you can unlock for your little boutique of debauchery, such as hiring a server to gather orders rather than making Hildred scurry up and down stairs, or unlocking a greenhouse where you can grow vegetables, but they never manage to change the core flow. Despite the occasional visual flourish, the strategy never truly grips; you never feel like you're moving off auto-pilot once you've got the hang of it.

Away from the action, the game's story has a similar problem with not fulfilling its potential. While the narrative has a grimly amusing edge – a mystery man blackmails Percival and Hildred into killing people he wants to eat – it's blunted by lacklustre writing that relies on tired clichés and unpleasant characters. While no one would expect to enjoy the company of a pair of homicidal chefs, the couple aren't funny enough to amuse, nor believable enough to intrigue. With a sharper story or more incisive strategy, this could have offered a grimly entertaining take on restaurant management sims. Instead, *Ravenous Devils* just ends up feeling undercooked. ■

ANATOMY OF A KITCHEN

Here's how the sausage is made... literally



1 GRINDER

This ominous contraption gobbles up bodies and spits out mince. Hildred keeps mentioning how little she actually cleans it, which is surely going to impact her establishment's hygiene rating.

2 OVEN

Where meat and flour are transformed into the best pies (that are made from humans) you can buy. While that kitchen might look unwelcoming, what with all the viscera, at least the ovens work well.

3 BODIES

Surely every London kitchen has a hole for where the bodies can pile high? While it might not look like the most sanitary option, rest assured that with business booming, they don't stay there for too long.

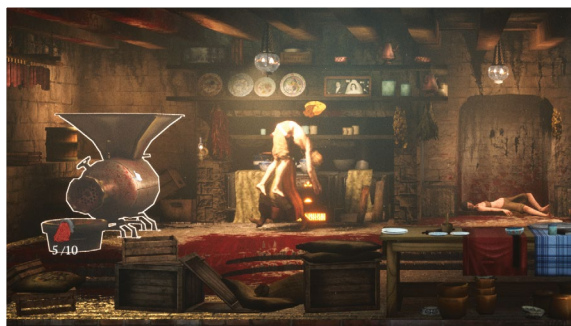
PC GAMER

VERDICT

Unfortunately *Ravenous Devils'* fun concept is squandered through rote strategy and charmless writing.

46

Hand-drawn cutscenes bookend the story.



No, Percival isn't feeling remorse, he just can't stand his clients.



LEFT: The recipes might be basic, but at least the doodles are fun.

BELOW: Guess what goes in that bathtub? Yes, more dead bodies.



2 / 3

9 / 9

RECIPES

Table N°1

UPGRADES

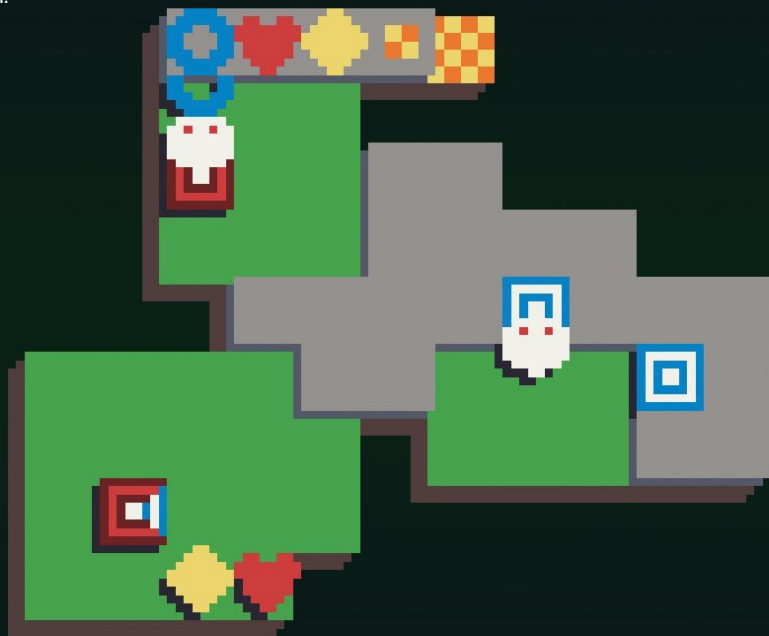
OPEN SHOPS

£8.35

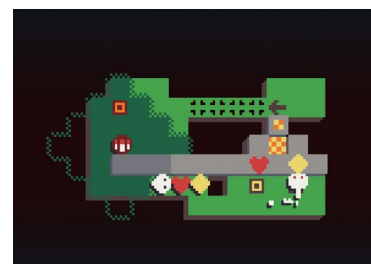
4/10



Here I am teleporting keys into locks like it's no big deal.



BELOW: Number blocks can be combined to make numerically greater blocks.



CTRL-DEAD

The afterlife is full of puzzles in **GIVE UP THE GHOST**

Of all the tools in the puzzle-solver's arsenal, the most essential is the undo button. You'll be making a lot of mistakes, particularly in a *Sokoban*-style block-pushing game. Thankfully, time-reversal is a thing of beauty in *Give up the Ghost*, ultimately speeding up as you keep the Z button held down. I found myself more ready to experiment, knowing how easily, how majestically my many blunders would be unravelled.

Ghost doesn't boast about its intricate puzzle boxes, but they're some of the most original I've come across. There are often a lot of tools in play, but they're introduced at a manageable rate, and come together in a careful way, with every icon being legible and easily distinguishable in the game's low-res environments.

Take teleporters – the most common mechanic in the game. Oh, they'll warp your ghost character from point to point, as in many puzzle games, but the warping blocks can also be pushed around. Teleporters are multi-purpose, and the various functions are clearly marked on the blocks, with legible icons telling you where you'll pop out, and which sides of the block can be pushed.

One of my big stumbling blocks with puzzle games is the amount of information I'm expected to store in my head, but *Ghost* is considerate enough to present as much information as possible within the actual game. I can see the outcome of many actions, without having to test them over and over. Somehow, it's not visually overwhelming as a result.

You can access all 50 puzzles from the start of the game

SPOOKOBAN

In a similarly friendly move, you can access all 50 puzzles from the start of the game. Indeed you'll need to, as the first one is unsolvable until much later. That means you can skip around when stuck, something I'd recommend as the later puzzles aren't necessarily tougher than the earlier ones.

NEED TO KNOW

WHAT IS IT?
A block-pushing puzzle game where you play as a ghost

EXPECT TO PAY
Free

DEVELOPER
John M Williams

PUBLISHER
In-house

REVIEWED ON
Intel Core i7-10750H, 16GB RAM, GeForce RTX 2060

MULTIPLAYER
No

LINK
gate.itch.io/ghost

And what puzzles. I've harped on about the teleporters, but what about the blocks holding pocket dimensions, the working number blocks, or the little acorn things that deactivate puzzle tools within a certain radius? If *Ghost* is missing a Big Idea, like *Baba is You's* programming logic, then it makes up for it with just how many ideas it has – and how well they work in concert.

There really isn't much to criticise about *Ghost*. I suppose the ghost theme is under-explored – you can't actually do any ghostly things, like float over gaps or through solid objects, so I was a bit confused until I realised it was just for show.

I love puzzle games, but I'm also not very good at them. With its generous method of presenting information, *Give up the Ghost* is the rare puzzler that meets me halfway, while still offering the devious challenge I'm looking for. ■

PC GAMER VERDICT

Give up the Ghost has some seriously smart ideas, and a huge heap of puzzles, presented in an elegant fashion.

84

BELOW: The premise is reminiscent of Attack on Titan.



NEED TO KNOW

EXPECT TO PAY
Free

DEVELOPER
bippinbits

LINK
bippinbits.itch.io/orbles

HORDE MODE

They might be giants in novel RTS **ORBLES**

In peculiar RTS *Orbles*, you're not trying to beat another faction operating with the same tools as you. No, your enemy is a horde of giants, advancing upon you from every direction. As the giants constrict the map, they will also demolish any of your structures standing in their way.

Given the circumstances, you might expect your citizens to display a bit of haste, but they're content to work agonisingly slowly, ferrying food and metal and fighting the giants with not a care in the world. Still, it gives you time to think about *Orbles'* single, extremely challenging scenario.

On a fixed map, you have to build up your little town so that you have enough workers to gather food and metal, and warriors to thin the encroaching hoard. All with the ultimate goal of acquiring three shiny

Solar Orbs, which are spread out in a triangular fashion around the map.

Unlike most RTS workers, the humanoid orblings will only walk on set paths. You need a path between the farm and the hut, to turn food into orblings, and paths between the mine, town centre and fortress to turn those orblings into warriors. To win the scenario, you'll need to be a master of path-optimisation, getting the orblings where they need to be in as little time as possible, so that you have enough warriors to make meaningful dents in the horde.

It's an extremely tough challenge, given that you're trying to learn how to play the game at the same time. I do like the ideas in evidence here, I just wish there were some game customisation options as those ideas deserve room to breathe outside this inflexible scenario. ■

61

ROLLING STONE

3D platformer **PEBBLE** is as humble as its name suggests

You name an animal, and someone has turned them into a platforming mascot, usually with a catchphrase and a pair of cartoony eyes. So I admire the unassuming nature of the protagonist in *Pebble*. You are literally a pebble, with only a pair of boots to add an element of anthropomorphism.

Everything about *Pebble* is minimalist, and that's refreshing in a genre stuffed with collectibles and radical marsupials. Here's a small, sunny world for you to explore, while enjoying a relaxing soundtrack.

Pebble does have one idea – any more would be overkill. The little pebble can acquire green gemstones, attaching them to its body for later use. You'll come across inactive platforms that will accept the gemstones as currency, allowing you

to unfurl bridges or shift floating platforms so you can use them.

The clever bit is that you will often need to circle back to retrieve the gemstones later on, recycling them for use in subsequent puzzles.

The cosy exploration of the early game transitions to precision, timed platforming that feels inelegant by association, thanks to a camera that sometimes parks itself in unhelpful places. An age-old problem for 3D platformers, but still an annoying one.

I never got *too* annoyed though – I never got too much of anything, as this is a chill and competent platformer, but one that never crosses into ingenious or intolerable territory.

A bigger game with smarter puzzles would be welcome, but then there's value in the little things – like a tiny, humble platformers you can finish in one sitting. ■

65

BELOW: The challenge ramps up towards the end.



NEED TO KNOW

EXPECT TO PAY
Free

DEVELOPER
Wardius

LINK
wardius.itch.io/pebble

Big 'he's behind you!' energy, like a pantomime with maiming.



ACID TEST

Sound design and discouraging restarts in **ALIEN: ISOLATION**

At first, the analogue tech of *Alien Isolation* doesn't make sense. Some tedious part of my dad-brain can't ignore the fact we have iPads now. But there's a logic to it. Perhaps taking stuff to space you can fix with a wrench is the most sensible option. Computers, speaking from experience, can be murdering, capricious bastards after all.

There are two vivid examples of this in *Alien Isolation*. The Working Joes are the most frustrating part of this otherwise impeccable game. Being hunted by a perfect killing machine is exhilarating; being bludgeoned by Milky Michael Myers less so. The second example is more esoteric. For some reason, I'm having repeated tech issues, from doors refusing to open to walls disappearing. At one point, early on, my doomed-to-die Irvine Welsh-alike companion, Axel, decides to stand and stare at me instead of opening a vent like he's meant to. A wonderful, awkward silence ensues. I eventually fix the problem by running *Alien Isolation* in administrator mode, which I sadly can't do with the game's rogue AI. A mild frustration,

and one that gives me renewed appreciation for the Sevastopol's chunky, fixable machinery.

GIGER SANCTION

There are two things I'm legally obliged to talk about with *Alien Isolation*. The first is the location, which we won't dwell on since cleverer people than I have explained why it's so incredible. But *blimey*. Every dilapidated corner feels like it was hewn from our shared collective memory of the film, so much that it's impossible to play it without feeling the constant pull of rewatching all... three films? Two? Four? Whatever. Follow your bliss. The other thing, to be crushingly obvious, is the sound. I'm playing it with headphones, and it's delicious torture. Every creaking

It all knits together into one of the weirdest games I've enjoyed

NEED TO KNOW

WHAT IS IT?
The last game you play before you learn to hate vents

EXPECT TO PAY
£35

DEVELOPER
Creative Assembly

PUBLISHER
SEGA

REVIEWED ON
Intel Core i7-7700 CPU @ 3.60GHz, 16 GB RAM, NVIDIA GeForce GTX 1070, Windows 10

MULTIPLAYER
No

LINK
feralinteractive.com/en/switch-games/alienisolation

pipe and slamming door is the kind of scary you only really appreciate in the jitteriest moments of a nervous childhood. It's 'getting up at 3.24am to go for a wee' terrifying. However much the sound design team at Creative Assembly were paid, it wasn't enough. We live in a world where people know about Chumbawamba, but not the names of the artists so good at their jobs they can scare me with pretend footsteps. We have failed as a species. Perhaps death by alien is too good for us.

It all knits together into one of the weirdest games I've enjoyed. A game where I'm simultaneously enthralled and horrified by every dripping vent and hissing door: "Yes, I am traumatised by this. But I can appreciate the level of exacting design nonetheless," I scream, internally, as I drag my reluctant frame across the floor of the Sevastopol. "What fun!" ■

PC GAMER VERDICT

Everybody gangsta until the motion tracker starts vibrating. *Alien Isolation* is the game headphones were invented for.

91

BELOW: Skinner, bearing down on you, like a threateningly sexy Specsavers advert.



NEED TO KNOW

EXPECT TO PAY
£15-£80 on eBay

DEVELOPER
HyperBole Studios

PUBLISHER
Fox Interactive

FOX HUNTING

Spending quality time with Skinner in **THE X-FILES GAME**

The expectation with FMV games is that they're always cheap and often rubbish. It's not that the actors are bad – more that there's nobody in production used to directing. *The X-Files Game* could have been an amazing disaster, then, especially considering how inelegantly some of the episodes have aged.

But it's something of an anomaly. It cost \$6 million and was filmed over four years, with scenes shot around the schedule of the series. It's quite telling that the central plot point is that Mulder and Scully have gone missing, but they do turn up eventually. But what could have been a gnawing disappointment turns into a positive: as FBI agent Craig Willmore, I have to team up with assistant director Skinner. I was braced for Mitch Pileggi to phone it

in. Instead, we get to see a side of Skinner only glimpsed in the show, expressing genuine concern about his missing agents. And you can elicit grumpy responses by offering him Fox Mulder's alien literature: a venomous, "I don't want that."

It suffers from all the problems FMV games usually do. You move around the world like you're shrink-wrapped. And it's easy to miss stuff. I head out with Skinner on my first case, then have to return to the office because I forgot to pick up my badge. I try not to make eye-contact with the FBI mastodon as I sneak back to my desk. But X-Files obsessives should consider trying to find it, just because of the loving level of detail it has. Yes, it's like a three-hour, 6/10 episode from season two. But it's hard to imagine anything like this existing now. ■

68



THE BUREAU: XCOM DECLASSIFIED

It's such a great pitch, isn't it? Braces! Aliens! Smoking! All the threat and precision of *XCOM*, but with the immediacy of a third-person shooter. You can tell from the construction of this intro that it doesn't deliver. *The Bureau* is a deeply strange game: a cut-and-shut of different ideas that never really coheres. It's a cover shooter with some inconsequential conversational elements; like someone made a *Mass Effect* game after hearing it described by six different stupid aliens. The result is akin to wearing a fedora in 2022: it feels like a great, stylish choice people will admire. But, actually, you look like a right twat. ■

61



WARHAMMER 40,000: DAWN OF WAR

Forget the lost, heretical technology of the past. There is one source of guidance now. One truth. And to live outside that truth is to risk ruin, ridicule and destruction. I am, of course, talking about trying to play *Dawn of War* with the original disks rather than just buying it again on Steam, complete with all 76 expansion packs that have been released since. It's the smart choice, partly because the box copy is probably lost in my parents' loft, and partly because I'm not certain my PC even has a disk drive. The Dark Age of Physical Media may have passed, but *Dawn of War* still bangs. No mercy for those snivelling xenos. ■

82



SPORE

Spore feels like Pixar's take on the xenomorph origin story in *Prometheus*. It's more revealing than I'd like. When faced with the question of carnivore or herbivore, I choose a life of meat. Soon, I'm chasing weaker creatures around the primordial soup, snapping their soft extremities with my disgusting beak. It's like watching a petri dish in fast-forward, and there's something rather satisfying about levelling up so I can eat bigger animals. So satisfying, in fact, that I might not grow legs at all. ■

75

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HARDWARE

GET THE PC TO SERVE



94

GROUP TEST

DDR5 memory is getting affordable – but is an upgrade worth it?



98

TECH REPORT

Investigating the state of VR gaming on PC.

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TECH TALES

Does better gear really help you become a better gamer?



102

BUYER'S GUIDE

Find the right build for you with our expert parts lists.

GROUP TEST

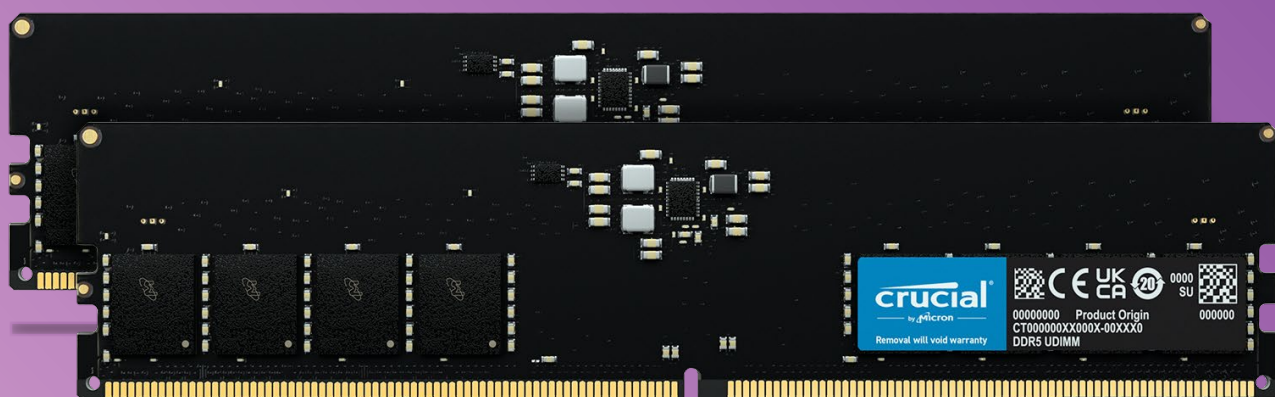
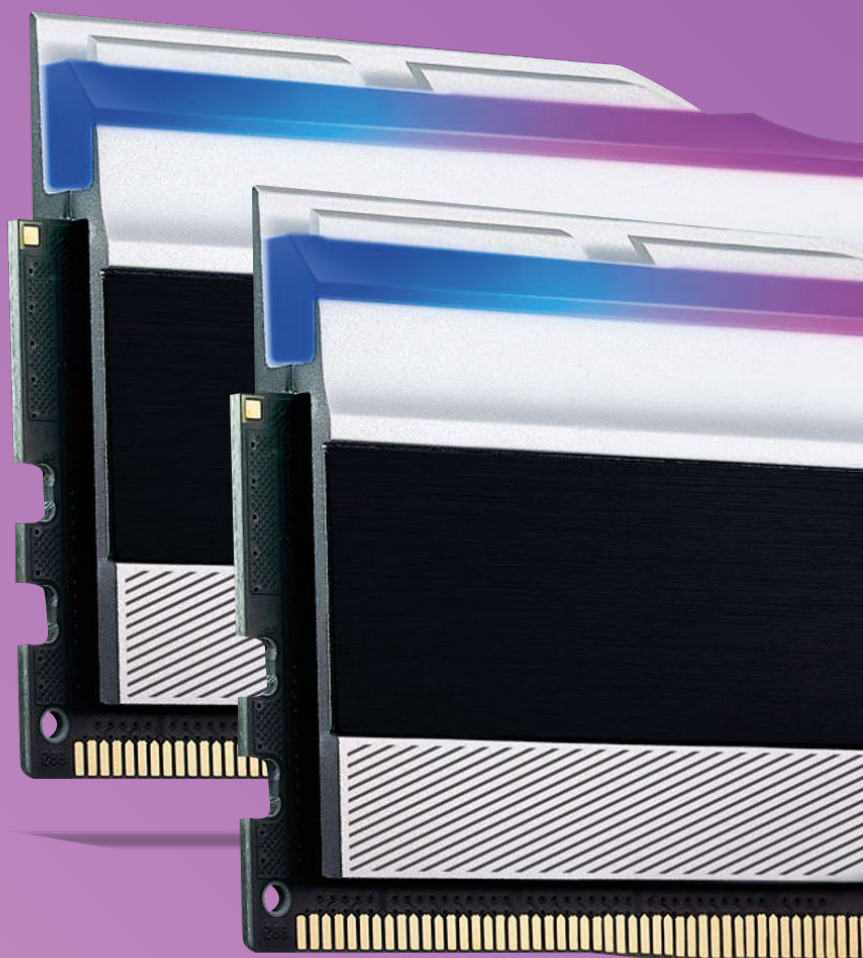
DDR5 MEMORY

We've tested the top gaming memory to find out which to pair with your new gaming PC.

By Chris Szewczyk

If you're on the hunt for the best DDR5 RAM to pair with your shiny new Intel 12th gen system, you've come to the right place. We've tested many DDR5 memory kits over the last few months ourselves and we've picked out the top kits, at different price points, to suit systems at different performance levels.

Back when DDR5 made its debut, it was expensive and very difficult – if not impossible – to find in many markets. That's all changed now, and while DDR5 remains expensive compared to DDR4, it's nice to see a PC component trending downwards in price, instead of up. In general, spending big money on RAM isn't recommended unless you have a high-spec rig to use it with. As prices fall though, you may find dropping a few extra dollars is worth spending to look at, say, DDR5-5600 rather than DDR5-4800. Some games and applications will respond to the extra speeds while others won't gain much, if anything at all.



2



Trident Z5 RGB

G.SKILL £400

Overkill kit for high-end systems

1 G.Skill rarely makes a misstep when it comes to high performance memory. The company consistently delivers fast kits that end up on the shortlists of gamers, enthusiasts, and us. Its DDR5 offerings are no different, and this Trident Z5 DDR5-6000 with its 36-36-36 timings really hits the sweet spot for high frequency and tight timings.

The kit is available in both black and silver finishes. Its futuristic look and RGB implementation look fantastic with its lovely diffused light bar along the top of the shroud. Some eyeball-scalding

individual LEDs can be a bit over the top, but actually that's not the case here. The price of this kit has come down a long way from its steep launch price. In fact it doesn't cost all that much more than a decent 5,200MHz kit, and with its extra speed and tighter timings, it's an easy recommendation. You get great performance, looks and, surprisingly, actually now value for money. It's widely available too! What a world.

PC GAMER VERDICT

- High speed and tight timings
- Eye catching design
- Consistently falling price

SPECS SPEED: 6000MHZ / TIMING: 36-36-36-76 / CAS LATENCY: 36 / VOLTAGE: 1.3V / DIMMS: 2X16GB

RAM

CRUCIAL £451

First in value, last in style

2 If you're after 64GB of DDR5, your options are limited. The Intel Alder Lake memory controller struggles with high density configurations, which is why there are very few 2x32GB kits available. The Crucial DDR5-4800 2x32GB kit is as generic as it gets, but if you need a lot of RAM for whatever task you want to throw at it, it's a great choice.

During our testing, the Crucial kit threw up a few surprises, sometimes matching a 5,200MHz kit thanks to its dual rank design. Add to that its low operating voltage and surprisingly good value for

DOES DDR5 RAM MAKE A DIFFERENCE FOR GAMING?

The answer depends on what speeds and latencies we're talking about. Games tend to be sensitive to latency, where lower is better. This means a good low latency DDR4 kit is still a perfectly viable gaming option. However, the real-world performance differences are small, and non-existent in GPU limited scenarios which is usually the case unless you're chasing very high frames per second.

If you have a good DDR4 kit, let's say a 2x16GB DDR4-3200 C14 kit or better, there's little reason to spend the money to upgrade to DDR5 for gaming.

The higher bandwidth of DDR5 is beneficial in other areas though, particularly in creative type applications. DDR5 uses less power, 32GB is generally the baseline and a DDR5 system is better for future proofing. As time goes on, we can also expect faster and lower latency kit.

money, and it's a good solid kit for work or play. It's the kind of kit that will have a long life, too. In a few years from now, 64GB will still be more than useful.

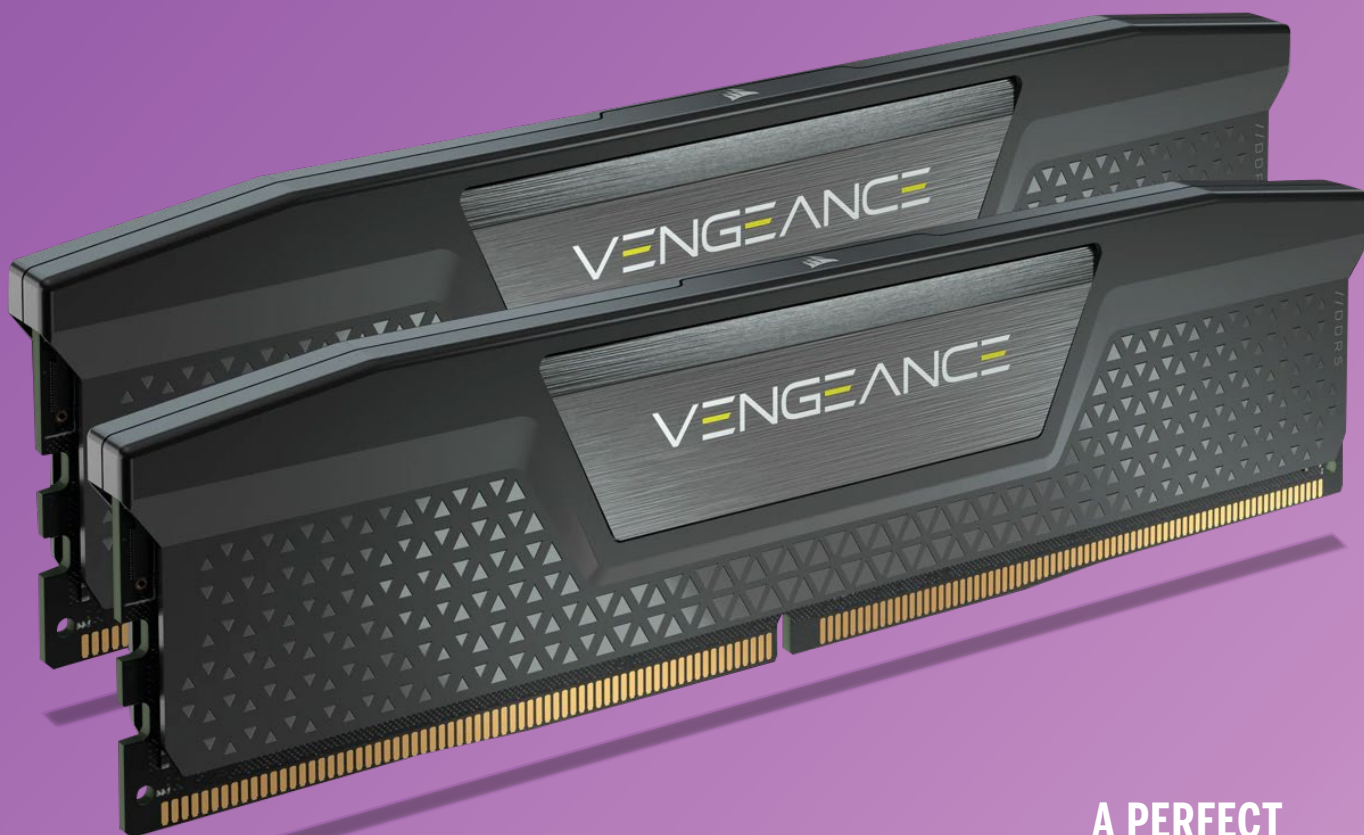
The Crucial Ballistix name is no more and this bare PCB kit won't win any beauty contests or set speed records. It really is just a couple of boring sticks of RAM. But as a set and forget kit for an alt-tabbing gamer or workstation user, it's definitely worth a look.

PC GAMER VERDICT

- 64GB for a dent price
- Bland and generic design
- Call that a brand name, Crucial?

SPECS SPEED: 4800MHZ / TIMING: 40-39-39-77 / CAS LATENCY: 40 / VOLTAGE: 1.1V / DIMMS: 2X32GB

GROUP TEST



A PERFECT
SET AND
FORGET KIT

3

Vengeance

CORSAIR £260

An everyday RAM champion

3 The Corsair Vengeance DDR5-4800 kit isn't the fastest you'll come across but it's one of the best options for a budget DDR5 system right now. At 4,800MHz it's not a speed demon by any means, though if you're using it with something like an i5 processor and an older or mid range GPU, you'd be lucky to notice any difference outside of memory sensitive benchmarks.

It's not that much of an overclocking kit but if you don't mind upping the voltage a bit, we've had it happily purring along at 5,200MHz in testing, which adds a bit extra to its

already excellent value. It's a perfect set and forget kit. At just 1.1V, it runs cool. It's a great pairing for a B660 build and its low height means it's a lot easier to use with large air coolers compared to many kits on the market. If you're on a tight budget and have decided to leave DDR4 behind, grabbing a kit like this instead of a higher speed kit and diverting the money to a better CPU or GPU will deliver tangible benefits.

PC GAMER VERDICT

- Perfect for budget DDR5 builds
- Easy to OC to 5200MHz or higher
- Modest timings

SPECS SPEED: 4800MHZ / TIMING: 40-40-40-77 / CAS LATENCY: 40 / VOLTAGE: 1.1V / DIMMS: 2X16GB

Dominator Platinum

CORSAIR £300

Show off

4 Corsair's Dominator kits hardly need an introduction, and these Dominator Platinum RGB kits really do look fantastic. The black aluminium heat spreaders are weighty and solid, and look the part alongside any high-end components inside your PC. The sticks are very tall though, so you'll need to make sure your cooler won't be impeded.

This kit runs at a speed of 5,200MHz with 38-38-38-84 timings at a voltage of 1.25v. That's a good sweet spot for a mainstream DDR5 system. Sure, it's still expensive compared to DDR4 and it does carry a bit of a

price premium over non-RGB 5,200MHz kits but at this price, it offers a good level of performance. As it's a Corsair product, it's ready to be integrated into a Corsair iCUE system. You can easily sync the memory's RGB with a case, cooler or keyboard/mouse combo. If you're an RGB lover, you'll have loads of fun playing with all the colours and settings. You'll struggle to find a better RGB kit at this price.

PC GAMER VERDICT

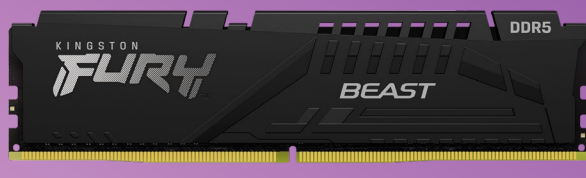
- Gorgeous looks
- Tall, can cause issues in some cases
- Limited OC headroom

SPECS SPEED: 5200MHZ / TIMING: 38-38-38-84 / CAS LATENCY: 38 / VOLTAGE: 1.25V / DIMMS: 2X16GB



4

5



6



Fury Beast

KINGSTON **£220**

A tame beast

5 Kingston's Fury Beast kit eschews flashy RGB lighting and huge heat sinks in favour of a design that's subtle and discrete. Not quite the beast we were expecting, but if your PC is sitting under a desk, do you really need a lot of bling?

The Fury Beast DDR5 memory modules have a black PCB with a low height aluminium heat spreader. That's handy if you're installing these in a compact PC case with limited room. It comes with SK Hynix ICs which means there should be some OC headroom on tap, however, our sample wasn't all that capable, with a stable

6,400MHz being a struggle when we were testing it. That's likely just our particular sample though.

The real strength of the Kingston Fury Beast kit is its value for money. At the time of writing it is one of the cheapest 2x16GB 6,000MHz kits on the market, and that's likely still true by the time this mag hits the shelves. If you care about performance and less about bling, this is a DDR5 kit that's well worth a look.

PC GAMER VERDICT

- High frequency
- Relative value for money
- Simple aesthetic

SPECS SPEED: 6000MHZ / IMING: 40-40-40-80 / CAS LATENCY: 40 / VOLTAGE: 1.35V / DIMMS: 2X16GB

T-Force Delta RGB

TEAMGROUP **£480**

Engage maximum frequencies

6 The Teamgroup Delta RGB DDR5-6400 kit is one of the fastest memory kits on the market. It's the kind of kit that is overkill for most users, but if you're fortunate to be rocking a high-end overclocked system, then you owe it to yourself to grab a set of high speed RAM to get the most out of it.

The Team kit we tested featured SK Hynix ICs and it had some surprising overclocking headroom. If you're a bit adventurous with your voltages, this is a kit that can push towards 7,000MHz, even. We were able to hit DDR5-6667 with 36-38-38

timings, making this DDR5 well and truly a step ahead of DDR4.

The kit is available in either black or white. Its diffused RGB lighting looks great and we're pleased to say that its price is well under what it was originally listed for. It's still a pricey proposition, and definitely not for everyone, but if you're one of those who is considering something like an RTX 3090 Ti, then a kit like the Team Delta RGB DDR5-6400 is a no brainer.

PC GAMER VERDICT

- Strong performance
- Overclocking headroom
- Lovely opaque RGB look

SPECS SPEED: 6400MHZ / TIMING: 40-40-40-84 / CAS LATENCY: 40 / VOLTAGE: 1.35V / DIMMS: 2X16GB



VR NOT AMUSED

Six years on from **OCULUS RIFT**'s launch, has the platform broken through?

VR first gained momentum at the same time that 3DTV lost it. When Palmer Luckey launched a Kickstarter campaign for a new headset unit in 2012, panel manufacturers were still half-heartedly extolling the idea of families sitting around the telly in wildly expensive glasses, watching something between a discernible movie and a magic eye. Few of us were listening though. If we were never fully committed to that future before, the idea of fully immersing ourselves in a virtual environment thanks to this Luckey chap's new doohickey only accelerated 3DTV's demise.

The campaign raised over \$2.5 million from 10,000 backers by the time Mr Zuckerberg came knocking. At the time of Facebook's \$2 billion acquisition of Oculus in 2014, the mainstream press started taking notice. Arguably the most influential figure in tech evidently believed this headset was the future – perhaps we should too, the thinking went.

FUTURE SHOCK

Had you stopped and polled people at that moment, eight years ago now, and asked them where VR would be in 2022, their expectations of market penetration would likely have been about 1,000%. Not only was the Oculus Rift

gaining massive media attention, smartphone giant HTC was rolling out a rival headset called the Vive and even Sony was getting in on the act with a PlayStation-compatible model that also used the previously redundant Move controllers. Few of those pollers would have predicted a 2022 that resembled our reality.

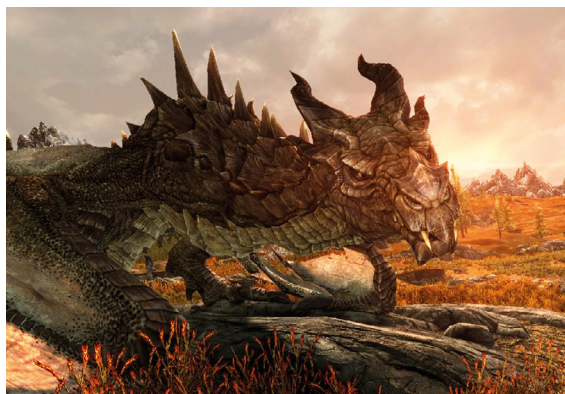
There have been mitigating factors in the intervening years that curbed VR's progress. Most obvious is the pandemic, which both created soaring demand for all gaming consumables and greatly inhibited their production. As early as February 2020, both Oculus and Valve announced that coronavirus was affecting production of their VR units, and that some shortages were to be expected. Like many tech firms, Valve relied on the Wuhan province in China for its manufacturing, which was one of the first regions globally to impose lockdown measures. That short-term disruption turned into a global semiconductor shortage as manufacturing facilities worldwide yoayed in and out of restrictive measures. At the time in human history when consumers were perhaps most primed for a device that immersed them in virtual environments from the comfort of their own home, companies simply couldn't meet that demand.

VR sales worldwide saw a dropoff in 2020, according to analysis firm Statista, with 4.9 million units sold and 5.4 million sold the previous year.



The first attempts

Long before Oculus, there was VPL Research. In the mid-1980s Jaron Lanier founded a company who prototyped headsets and gloves designed to put you in a virtual space, immersed in every sense. Lanier was the first to coin 'virtual reality', and VPL's haptic glove and full bodysuit proved as impressive as they were overambitious. The company folded in 1990.



FAR LEFT: *Half-Life Alyx* brings us closer to a treasured virtual space than traditional games ever have.

LEFT: Well they'd already put *Skyrim* on everything else, VR only made sense.

GOGGLE BOX *The big players in PC VR in 2022*



HTC VIVE PRO 2 £720

Massive FOV, massive resolution, 120Hz refresh rate. It runs a bit hot during longer sessions, though.



HP REVERB G2 £550

The huge 4320x2160 resolution rivals the Vive, but HP's offering doesn't quite have the FOV.



OCULUS QUEST 2 £300

Popular on the grounds of its affordability and convenience, it's also one of the quickest to set up.



VALVE INDEX £920

The big boy. It's the priciest, but it does feel the most premium of the lot of them to make up for it.

VR can't blame its modest adoption rate squarely on the coronavirus pandemic, though. Manufacturers were failing to meet consumer demand consistently since the Oculus Rift first released on March 28, 2016. Oculus apologised to customers on April 4, a week later, that due to a component shortage it would be delaying shipments. Users reported having their preorders cancelled, or not being able to place an order at all. For its part, HTC followed suit with a very similar preorder experience, temporarily suspending its site in a bid, many believed, to keep the waiting list manageable.

That had a knock-on effect on developers, who have remained suspicious about developing for a platform with such specific requirements, a minuscule userbase, and a massive financial buy-in. Six years since Oculus Rift launched, what are VR's killer apps? *Half-Life Alyx* is a stupendous experience that speaks to all the platform's unique and transformative properties, but it exists in a field of one. Only Valve is rich enough, and by virtue of also being a platform holder, committed enough to make such a game. Even Sony hasn't gone as big – *Dreams* is the biggest first-party title under PSVR's banner. With all the respect in the world to that title, Valve released a *Half-Life* game for VR.

A FISTFUL OF HEADSETS

Is it as simple as a standoff between developers and consumers, each waiting for the other to incentivise their investment? Well, picture yourself as a studio head in 2022. There are three billion gamers on Earth. 1.8 billion of them play

on PCs of some description. Just under 700 million play on consoles. Develop a game for one, and you can reasonably easily port it to the other. And then there's VR. Statista has the total number of VR headsets at 16.4 million. In order to produce a game for them, you'd need to work in a totally new way, on a platform hardly any developers have experience of. Which platforms do you pick for your next game?

And yet it has given us wonderful experiences. *Euro Truck Sim* is a zen garden of autobahn bliss. The aforementioned *Alyx* gives us *Half-Life 3* by another name.

Indies like *Keep Talking and Nobody Explodes* show its vast potential, and even passable ports like *Skyrim VR* show us what our familiar franchises could be like, if VR really took hold.

And Mark Zuckerberg still believes it will. Even though Reality Labs (nee Oculus) operates at a yearly loss of over \$10 billion, Meta's vision of the future places VR at the absolute

epicentre. It's where we'll live our entire lives, socialise, buy stuff, play, and work, Zuckerberg reckons.

Even after six years, the hurdles VR faces, as both a gaming platform and a dehumanising and alienating dystopia, are the same as they ever were. Scarcity of product. High pricing. Few enticing titles. The necessity for a decent-sized area of your house cordoned off specifically for use as a VR space. The closest anyone has come to addressing those massive issues is ditching the cables on the Oculus Quest. While Meta plots our enslavement in its 'verse forever, as gamers we're still waiting for developers and platform holders to blink first. ■

Phil Iwanik

VR CAN'T BLAME ITS MODEST ADOPTION RATE SQUARELY ON THE PANDEMIC

UNFAIR ADVANTAGE

PC HARDWARE makes us play better, say the ads – is it true?

Marketing around games has changed considerably over the last two decades. There are far fewer young women in lingerie trying to make a network adapter look sexy, for example, or gamers whose entire heads are exploding due to the intensity of the latest title. But in the realm of PC hardware, at least one maxim has remained more or less unwavering: buy this thing, and you'll magically see your own prowess as a gamer transform.

There's more sophistication to the message now. Esports team-endorsed products. MMO mice. MLG gamepads. Still, it boils down to the same idea PC hardware was sold on in the Razer Boomslang days: that there's some kind of linear relationship between money spent and k:d. And that ignores the greater truth about the reason we invest in our pastime: it brings us comfort and enjoyment to indulge in a little nook of escapism. And just like any leisure pursuit, spending the money is actually part of the fun.

However, we've all experienced some delighted moment when we discover we're actually much better at *Team Fortress 2* now we're not trying to aim on a laptop trackpad anymore, or that in the advent of a newly purchased GPU, *Battlefield V* is quite a bit easier at 60fps than 14. Extreme examples, but they get us wondering about where else we

might squeeze extra kills, lap time, or XP without having to actually be better at the game.

Such was this writer's disposition during the peak of my CS:GO habit. Here's a game that's been in circulation in various guises since 2000. The players you might meet on any given server may well have two decades of skin in the game. The standard of play is implausibly high. Languishing in the silver ranks, I looked for every possible marginal gain I could find. How much better could a few hardware upgrades really make me?

IN THIS CASE, OLDER, LOWER SPEC HARDWARE OFFERS THE ADVANTAGE

you make headshots easier, since heads are now rendered using more pixels. You lose some FOV at either side, but if an enemy appears over to the extreme left or right of your screen they've probably got the jump on you anyway.

I had to downgrade my 32-inch 16:10, 2560x1600 monitor to a tiny 23-inch 16:9 panel to achieve this. It was the opposite logic to that of the typical hardware ad – in this case, older, lower spec hardware offers the advantage. Personally, I didn't find myself getting any more headshots than before, though.

THE GOLDEN RATIO

Not being the first to think along such lines, I consulted the wealth of wisdom already out there on forums, pro players' streams and YouTube vids. Most serious players stretch a 4:3 aspect ratio out and run a 1280x960 resolution on a 16:9 panel. The idea is that by warping the image horizontally

Probably the shrink down in panel size offset the potential benefit to stretching a 4:3 image out.

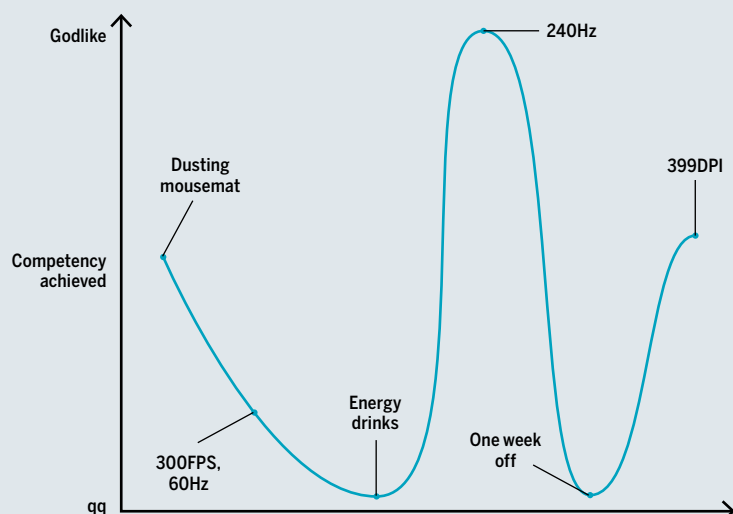
Next: frames per second. The theory to this isn't complicated: the more frames of information about an enemy's exact location are available to you, the more accurately you can track their position with your crosshairs and, ultimately, make them go on the floor.

The catch, of course, is that you only see as many frames as your monitor can actually refresh in a given second. Since CS:GO's not a particularly demanding game, most systems can run it at hundreds of FPS, but high refresh rate monitors are less commonplace. I swapped one in – a 240Hz panel that could give me 240 new bits of information on my enemy's whereabouts every second.

And this was a game changer. The smoothness of mouse movement, the clarity of enemy silhouettes in motion, was extraordinary when jumping up from 60fps. My k:d ratio made an immediate leap forwards.

HIGHS AND LOWS

Finding marginal gains, charted



PHIL IWANIUK
Phil Iwaniuk still isn't a Global Elite in CS:GO, he just doesn't blame his setup anymore. Rumoured to be prototyping the world's first all-mechanical key mousemat.



MAJOR LASER

Finally, the mouse and keyboard. I tried several gaming mice, all designed for shooters, all with massive DPI ranges, and found that the simple two-button Zowie FK1 was the clear winner. Most CS:GO players use a DPI under 800 (I'm a 400 player) so the smoothness of movement in this sensitivity range mattered so much more than anything else. Even braided cabling. No mouse, however, affected my performance more than using the right DPI. In short: the correct software setting trumps any hardware upgrade. As for keyboards, I noticed no difference in my performance between using membrane or mechanical models.

I concluded the venture with a slightly higher rank, slightly less money in my bank account, and a sense of what investing in gaming hardware really buys you. All of us probably have one potential upgrade to our systems that we'd really feel a tangible benefit from, and perhaps even a little boost to our ability. But more often, we're investing in ourselves, committing to our pastime and enjoying the look and feel of a space that's devoted to what we love. ■

ABOVE: Look at them. Conspiring against you. Undermining your every input. We're onto you, peripherals.

BELOW: CS:GO is free to play, freeing up some frivolous upgrade budget.



YOUR NEXT PC

BUYER'S GUIDE

Build the best PC for your budget



KEY

Budget build

PC gaming is for everyone. Pick the parts you want to build a new, well-rounded PC for a good price.

Mid-range build

You want to run every new game at 1080p 60fps. This recommended build will see you through.

Advanced build

You're looking for the best PC on the market and superior components. But you still want to spend smart.

BUDGET BUILD

Enjoy 1080p gaming without breaking the bank



TOTAL
£952

MOTHERBOARD		B660M Pro RS ASRock £115 This is as cheap as we want to go while still offering room for expansion and upgrades down the line.
PROCESSOR		Core i5 12400F Intel £170 There's no iGPU on this chip but it's a little cheaper as a result, and will work great for this particular build.
GRAPHICS CARD		GeForce RTX 3050 Nvidia £239 This GPU will deliver 1080p performance easily, and with 8GB of memory it's built to last.
COOLER		Laminar RM1 (included with CPU) Intel £0 There's room for an upgrade here, but on a budget the included CPU will work just fine.
MEMORY		Vengeance LPX 8GB (2x 4GB) DDR4-2400 Corsair £39 You could bump this to 16GB, but to save as much as possible we'll stick to 8GB.
POWER SUPPLY		CV Series 550W Corsair £39 You could likely make do with less wattage, but Nvidia recommends a 550W PSU for the RTX 3050, so let's be safe.
SSD		MX500 500GB Crucial £57 One of the best value SATA SSDs you can buy and plenty fast enough for a snappy OS.
HDD		WD Blue 1TB 7200rpm Western Digital £37 You don't need a HDD, so feel free to cut this to save cash, but one sure helps if you're a virtual hoarder.
CASE		Neos BitFenix £36 You'll want to minimise how often you rebuild your PC, so make sure to give it a good home. This case'll do nicely.
DISPLAY		GW2280 BenQ £105 A 1080p60 VA monitor will see you through in style and, once you upgrade, will make a superb second monitor.
KEYBOARD		G213 Logitech £40 It may be a membrane switch board, but it's stylish, and well-built. Sometimes that's worth more than cheap clicky switches.
MOUSE		G102 Logitech £35 A classic shape delivered in a sleek shell, this mouse fits all hand sizes and grips. A solid option for the money.
HEADSET		HS35 Corsair £40 This headset delivers in-game with its punchy drivers and clear microphone – perfect for video calls and multiplayer alike.

MID-RANGE BUILD

Our recommended build for playing the latest games



TOTAL
£1,500

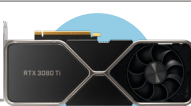
MOTHERBOARD		B660M Mortar WiFi MSI £180 This MSI board delivers everything we need in a compact package and allows us to use much cheaper DDR4 memory.
PROCESSOR		Core i5 12400 Intel £170 Intel's 11th Gen was at its best on a budget, and that's why this six-core/12-thread processor is a great fit for this build.
GRAPHICS CARD		GeForce RTX 3060 Ti Founders Ed. Nvidia £369 The RTX 3060 Ti is a little overkill but we're willing to make sacrifices elsewhere to make it work.
COOLER		Laminar RM1 (included with CPU) Intel £30 Intel bundles a redesigned CPU cooler with some 12th Gen processors. This little chip chiller will serve us well for a while.
MEMORY		Ballistix 16GB DDR4 (2x8GB) Crucial £75 With plenty of capacity at 16GB, this unembellished memory has everything you need for gaming and more.
POWER SUPPLY		CX650M Corsair £93 The heart of your gaming PC is your PSU, and this 650W Corsair promises to keep your rig ticking nicely.
SSD		S70 1TB Addlink £70 Building on a budget doesn't mean sacrificing speed – the Addlink S70 proves you can indeed have both.
HDD		WD Blue 1TB 7200rpm Western Digital £37 Just like in the budget build, this HDD isn't strictly necessary, but for a pretty low price it's nice to have plenty of extra space.
CASE		Eclipse P400S TG Phanteks £70 An ATX case is all you need for this build. We like this one because it's simple, functional, and really nice to look at.
DISPLAY		AOC G2590FX AOC £173 Everything a PC gamer could want: Full HD, 144Hz refresh rate, 1ms response time, AMD FreeSync and Nvidia G-Sync compatible.
KEYBOARD		Alloy FPS HyperX £80 As the name suggests, this keyboard is built like an absolute tank, with a steel frame and Cherry MX switches.
MOUSE		Model O- Glorious £59 Lightweight and responsive, the Model O- has made a name for itself among streamers and pros thanks to its clever design.
HEADSET		Blackshark V2 Razer £94 The Blackshark V2 offers up some killer audio quality to rival the greats. And at a reasonable price too.

ADVANCED BUILD

Go above and beyond with a PC powerful enough to end worlds



TOTAL
£4,501

MOTHERBOARD		MPG Z690 Carbon WiFi MSI £410 This MSI motherboard offers a mix of high-end features, plentiful ports, and DDR5 support, without an extreme price tag.
PROCESSOR		Core i9 12900K Intel £599 Intel's Core i9 12900K represents Alder Lake's finest chip, and it's one hell of a processor for whatever you might throw at it.
GRAPHICS CARD		GeForce RTX 3080 Ti Founders Ed. Nvidia £1,199 The RTX 3080 Ti is the latest flagship graphics card from Nvidia, but savvy builders may prefer the RTX 3080.
COOLER		Kraken X63 NZXT £123 One of the most stunning AIO coolers rebuilt with an updated pump, LGA 1700 bracket, and RGB lighting for more pizzazz.
MEMORY		Dominator Platinum RGB 32GB Corsair £290 A new memory standard for a new era of memory speed. The Dominator Platinum RGB 32GB is blisteringly quick.
POWER SUPPLY		SuperNOVA 1000 G5 Gold EVGA £200 This calibre of gaming PC draws a lot of power. Thankfully, this PSU can handle it with high efficiency.
SSD		WD Black SN850 1TB Western Digital £120 Though technically this platform support PCIe 5.0, for now we're sticking with WD's PCIe 4.0 speeds with the SN850.
HDD		860 QVO 2TB Samsung £195 Built on QLC flash memory, it's not the quickest storage around, but it's a speedy alternative to an HDD.
CASE		600C Corsair £135 If you're going big on parts, you should grab a case that has plenty of room for upgrades down the line. This one will do just fine.
DISPLAY		Nitro XV273K Acer £780 This one's an easy choice – 4K and 144Hz for under a grand is an offer we can't refuse, and neither should you.
KEYBOARD		G915 Lightspeed Logitech £210 Low-profile mechanical switches are just the icing on the cake that is the superb, wireless Logitech G915.
MOUSE		G502 Lightspeed Logitech £110 With a lengthy battery life and a phenomenal sensor to keep you gaming at your best, the G502 is undoubtedly one of the finest.
HEADSET		Arctis 7 Wireless SteelSeries £130 If you've settled on a wireless keyboard and mouse, the last thing you want is a pesky cable to your headset.

EXTRA+LIFE

CONTINUED ADVENTURES IN GAMING



“Moving would mean leaving my house and everything I built up”

Taking property risks in **FINAL FANTASY XIV**

Guilds in MMOs are a wonderful thing. They bring players together under a common cause to tackle deadly dungeons, navigate new challenges, and build friendships. But like all online communities, they don't always last.

When a game has been out for over a decade, it's natural that some people will move on to other games or get too busy with life, leaving formerly tight-knit groups to fizzle out. It's no one's fault – that's just how it goes. It's also why I decided to risk all of my in-game wealth in one huge server move gamble.

The latest patch for *FFXIV* (6.1) saw the opening of a new housing area, and with it hundreds of new plots for home enthusiasts to scramble after. It also introduced

▶ **DANIELLA LUCAS**



THIS MONTH
Gambled everything on a chance for a new life.

ALSO PLAYED
Unpacking, House Flipper

a new lottery system to give everyone a fairer chance of getting a plot, after years of notorious housing woes. I already owned a house so I never really thought about the lottery. It was a silly house shaped like a Paissa (a giant, wide-eyed Totoro-monkey-squirrel-thing) full of stupid little things I've collected over the last eight-ish years.

But the game has gotten quieter for me in the last two years – my in-game friends logged in less and less as other commitments came first. I was getting lonely.

ABOVE: There goes the neighbourhood.

Luckily for me I met a bunch of lovely people in-game in a cross-server event that led to us forming our own offshoot Discord and regular casual raid night. There was just one problem: all of my friends were on another server. I'd need to move for us to make our own guild, and that would mean leaving my house and everything I built up there behind with no guarantee of a home on the other end...

MOVING DAY

After a big sigh and a brief “Fuck it”, I packed up my belongings and abandoned my server in the middle

IT WAS A STUPID LITTLE HOUSE FULL OF STUPID LITTLE THINGS I'VE COLLECTED



of the night. Homies before homes, right? £12 and a server move later, I found myself standing in front of a random plot in Ishgard, registering for the lottery. I waited anxiously for the day the results would be shown, but soon reports of an in-game bug started pouring in. The game counted the number zero as an entry even though no one could claim it; hundreds of properties were rendered unwinnable because of it, much to the frustration of players and developers alike as they rushed to fix it.

Nervously I approached my placard. It wasn't my number. My gamble didn't pay off, but hey, I had an active guild now and could try again when the bug was fixed. With a heavy sigh I went to get my housing deposit back, only to find I couldn't...

I was standing at the right plot, but in the wrong ward. In my rush to check the result I had teleported to the wrong area. Now standing in front of the actual right plot, I held my breath as I clicked again. "Congratulations! You are the winner of this lottery. Finalise your purchase and claim your plot of land?"

Sweet relief. My gamble paid off, but I don't think I could do it again. My heart can't take it. ■



Miraculously, the game even finds useful things for C-3PO to do.

"It makes all the films fun regardless"

Even the bad movies are good in **LEGO STAR WARS**

▶ ROBIN VALENTINE



THIS MONTH
Hit the 'Talk to Maz' bug. If you know, you know.

ALSO PLAYED
Star Wars Jedi: Fallen Order,
Elden Ring

Developer Traveller's Tales has achieved something really special with *Lego Star Wars: The Skywalker Saga*. Making all nine mainline films playable in one game was hugely ambitious, and the result is a lovely tribute to an iconic series. But that structure does end up shining a light on the fact that, taken as a totality, Star Wars is mostly... well, not very good.

Out of nine movies, any sensible person can agree that at least five of them are rubbish, perhaps up to seven (depending on your tolerance for Rian Johnson, Daisy Ridley, and teddy bears somehow overthrowing fascist empires).

From that angle, you'd think the full series might actually not be a good basis for a game. But the alchemy of Lego is the vital element here – by turning each film into a toybox adventure full of gentle parody and pure silliness, it makes them all fun, and even nostalgic, regardless of cinematic quality.

The prequels were dry and weightless on screen (no historical revisionism here, please), but their

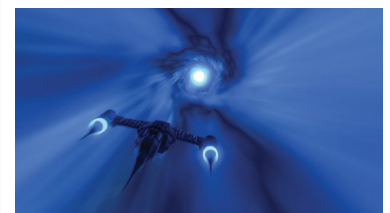
abundance of visual creativity and set-piece action makes them an oddly good basis for a game. In *The Phantom Menace* alone, you go from a lightsaber fight, to a submarine chase, to a podrace, to a pitched battle, to a spaceship dogfight – all in the space of a few hours.

MOVIE MAGIC

Similarly the modern trilogy was scatterbrained and mired in the past, with a middle chapter you either love or hate. In Lego form it shines even if you never connected at all with Rey, Finn, or Oscar Isaac's perfect jawline.

The first and third films felt like Star Wars theme park rides, but in this context that's an ideal foundation for light-hearted, nostalgic adventure. And *The Last Jedi* is the perfect target for gags, receiving a good-natured ribbing that serves both camps: a fun parody for the film's fans, and a bit of gentle catharsis for its detractors.

Being a Star Wars fan has been rough since 1999. God bless Traveller's Tales, then, for finding a spark of goodness in all of the films. If you're not at peace with the series in 2022, let *The Skywalker Saga* be your nine-part therapy session. ■



“When there’s an opportunity to do more than chat, Norco is at its worst”

NORCO is a great piece of fiction but a mediocre game

Norco demanded to be played. A surreal, anti-capitalist point-and-click with striking, grungy art and writing that’s evocative, angry, and exhausted – how could I decline? I was confident it would be my jam, with comparisons to *Disco Elysium* and *Kentucky Route Zero*, as well as glowing reviews, sealing the deal.

And it absolutely did prove to be my jam, at least initially. It’s bleak and beautiful, with a strangeness that gives it the air of another reality. But it’s grounded in the problems and frustrations of the real world, where corporations pillage and pollute as a matter of course, leaving behind a string of ruined towns and people.

As a piece of fiction it’s great: clever, pissed off, and deeply weird. But as an adventure game, or any game, it’s not quite as impressive. You just move from scene to scene, having long (but often scintillating) conversations and doing very little else. There’s not much agency to be found in *Norco*, just a script that you, for the most part, have to follow.

▶ FRASER BROWN



THIS MONTH
Getting pissed off with capitalism again.

ALSO PLAYED
Lego Star Wars: The Skywalker Saga, *RimWorld*

When obstacles do get flung in your way, when there’s finally an opportunity to do more than chat, *Norco* is at its worst. There are some puzzles and even a few fights, but they’re more like half-hearted minigames, making you remember basic patterns or asking you to click on a circle at the right time.

It’s dire stuff – incredibly basic, equally dull, and utterly incongruous to the rest of the game. They’re bad, but the real issue is these rare moments of interactivity feel like they’ve been hammered into *Norco* just for the sake of it.

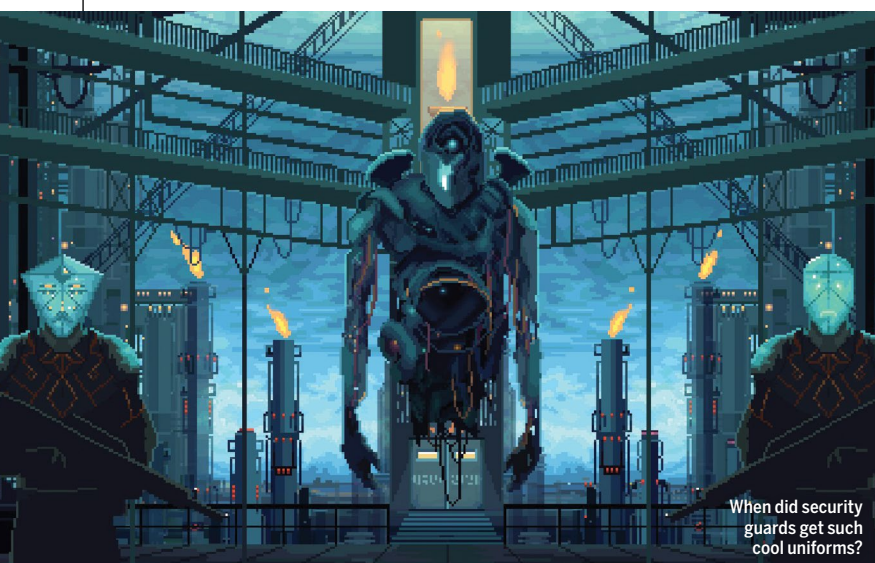
YOU JUST MOVE FROM SCENE TO SCENE, HAVING LONG CONVERSATIONS

These minigames give the impression that they’ve been designed by someone who resents needing to add more traditionally gamey stuff to their narrative romp. They’ve been chucked in with seemingly little or no consideration. But that can’t be true. Nobody designs a party-based combat system in their adventure game (even if it is rubbish and barely used) out of a sense of obligation.

NORCO-DEPENDENT

Occasionally there are bright spot where the solutions genuinely feel creative and engaging, like using your phone to record conversations, which you can then play back to another character to manipulate them. Instead of taking you out of your investigation to play some minigames, you’re using your most important tool in a way that makes sense. But those moments are the exception.

Problems like this crop up in a lot of narrative darlings. But games like *Disco Elysium* and *Unavowed*, which boast exceptional writing and thoughtful stories that coexist with extremely interactive systems, now make this much harder to ignore. ■

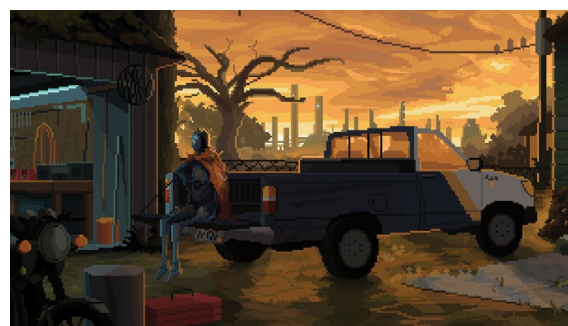


When did security guards get such cool uniforms?



LEFT: *Norco*’s ominous refinery looms over everything.

BELOW: You get your very own pet robot. She’s not very helpful.





“As Margit the Fell Omen points out to me, this is absolutely not the way”

Learning to stop and smell the vicious murder in **ELDEN RING**

As a recovering completionist, any open-world game I try in 2022 poses an inherent dilemma: how much of this world do I experience? Historically I've given into the guilty pleasures of Ubisoft-style games, merrily chasing question mark-laden maps and filling progress bars to 100%.

Recently, I'm taking a more direct approach. Rather than attempting everything, I'm being more selective. With *Dying Light 2* and *Horizon Forbidden West* out this year, too, there's only so much time.

Elden Ring presents challenges to both halves of my virtual tourist, it turns out. As you'd expect from a FromSoftware open-world game, trite modern conventions like question marks are absent. You do have a mount and fast-travel points to help you get around the Lands Between, but with the fact that hidden map fragments are necessary to reveal parts of your map, and that most enemies besides bosses are

HARRY SHEPHERD



THIS MONTH
Discovered that FromSoftware NPCs aren't always 'good'.

ALSO PLAYED
A Memoir Blue, *Little Nightmares 2*

resurrected when you rest at a Site of Grace, seeing every last thing in these perilous lands can be arduous. Beyond rewarding you with all available Steam Achievements, nobody at From is patting you on the back for visiting every location and speaking to every NPC.

Instead, since I'm starting the game a month later than most, I needed to tap into my other open-world self. Feeling my usual paralysis as I step into Limgrave for the first time, I'm buoyed by a golden ray of

light pointing the way. But before I follow that I stop to speak to my first NPC, a man wearing a white mask called Varré. He tells me to head towards the dramatic Gothic fortification behind him: Stormveil Castle. The ray of light is pointing a little to the right of it, so that must be the way to go.

WHITE-FACED LIAR

I'm right, but also extremely wrong. As my new nemesis Margit the Fell Omen points out to me figuratively and physically with his glowing golden swords, this is absolutely not the way. Varré must be sniggering behind his mask.

Of course this *is* the way, just eventually. Varré wasn't messing me around completely, he just left out a crucial part in his instructions: get more powerful first. I needed to level up. Find better weapons and upgrade them. Gain experience from other, lesser bosses.

To conquer the Lands Between I must explore like never before, but still take my time. In the meantime, other worlds can wait. ■

NOBODY AT FROM IS PATTING YOU ON THE BACK FOR VISITING EVERY LOCATION

HALO: THE MASTER CHIEF COLLECTION

Flying skulls and flood invasions prove the fight isn't over. *By Nat Clayton*

At the end of 2020, 343 Industries completed its long journey to bring every mainline *Halo* game (except 5) to PC. It was a tremendous feat, but not the end of *The Master Chief Collection's* journey by far, with season after season of thematic updates bringing new cosmetics, modes, and entire new maps to shooters that hadn't otherwise seen updates in over a decade.

Halo Infinite's release may have called time on these massive seasonal drops. But as the latest update proves, 343 is far from done tinkering with the venerable FPS collection.

The Master Chief Collection's April update is headlined by an unseasonably spooky rework of Firefight, *Halo's* PVE horde mode. Flood Firefight lets the green mist descend over New Mombasa's streets as the Flood hordes invade *Halo 3: ODST* as a new enemy type. But you're not Master Chief in *ODST*, and you might find dealing with the Flood to be harder than before.

Halo 3: ODST's Flood keep all their tricks and forms from *Halo 3* proper, with special spider forms that

NEED TO KNOW

RELEASED 2019	DEVELOPER 343 Industries
PUBLISHER Xbox Game Studios	LINK halowaypoint.com

scurry up walls and transform into all manner of nasties. But they've also picked back up their *Halo 2* talents for driving vehicles and mounting turrets, and will occasionally give the Orbital Drop Shock Troops a taste of their own medicine by spawning in from the sky via dispersal pods.

But the nastiest trick up the Flood's shroomy sleeves is the ability to bring back fallen players as ramblin', shamblin' zombies. If a teammate is packing a spicy loadout, be prepared to have it turned against you when they die.

Adding zombies to a horde mode is a no-brainer, but it's emblematic of *The Master Chief's Collection's* unique position as a live, ongoing recontextualisation of a series of shooters. Sometimes it's not so great, shoehorning in clashing armour cosmetics. But when 343 is asking questions like, "What if we put the Flood in Firefight?" its role as fans-turned-developer really pays off.

SKULL-SHOT

This playfulness extends beyond turning Firefight into a mushroom buffet, mind. April's update also added multiple new Skulls (modifiers that dramatically change core game mechanics) across *Halo 2*, 3 and *ODST*. There are Skulls that forbid you from picking up alien weaponry, Skulls that randomly disable HUD elements, Skulls that cause brutes to explode like bombs. There's even a Skull that gives you near unlimited flight, which should make grabbing *Halo 2's* scarab gun a lot easier.

Particularly neat is the addition of two new co-op Skulls for *Halo 3*. Bonded Pair gives one player a massive damage boost when the

THE MORE EXCITING NEWS IS THE ROLLOUT OF MOD SUPPORT

other dies, while Master Blaster sees one player unarmed but heavily shielded while the other gets infinite ammo with zero shields.

But the best thing to come out of *The Master Chief Collection's* PC release has been mods. *Halo: CE* had a thriving modding scene back in the early 2000s, one that gave us everything from the series' best deathmatch arenas to playable shitposts that pit Master Chief against Goku. While still not quite complete, bringing those same tools to games like *Halo 2* and 3 has been utterly transformative.

The April update adds some neat new tools to *Halo's* built-in Forge editor, but the more exciting news is the rollout of mod support. The plan is to bring Steam Workshop support to the entire collection.

Because while 343 still has updates in store (more cosmetics, better accessibility features and more secret collectables), eventually *The Master Chief Collection* will be content complete as the developer focuses fully on *Halo Infinite*.

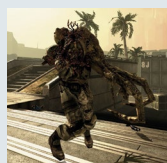
The MCC is a true accomplishment, and the best place 343 can leave it is in the hands of fans – fans who will, if precedence teaches us anything, spend the next decade or more remixing and remaking a collection of all-time FPS greats in ways neither 343 nor Bungie could ever foresee. ■

FUNGAL IN THE JUNGLE

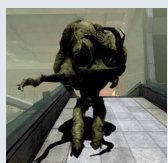
These undead shrooms aren't safe to eat



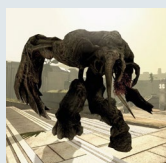
SPORE
Sure, they burst like balloons, but ignore them and they'll bring fallen warriors back from the dead.



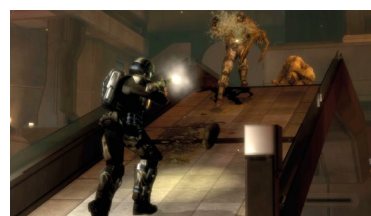
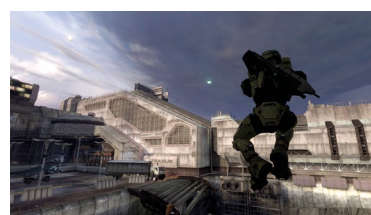
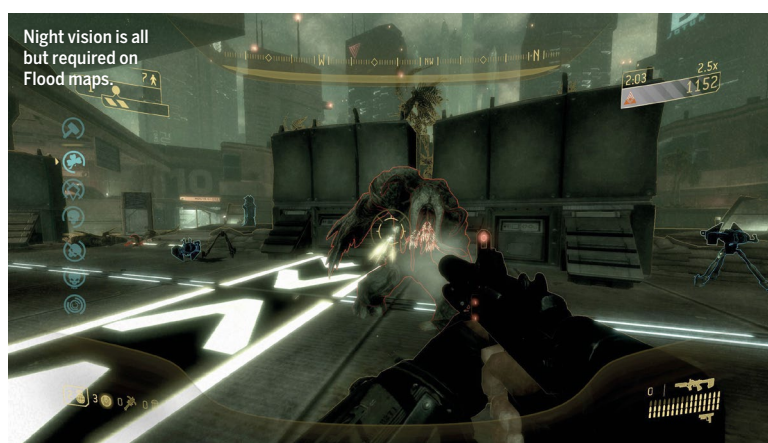
INFECTED
Basic zombie. Aim for the head, or literally disarm them to render them totally 'armless.



CARRIER
When this walking broccoli pops, it'll explode into dozens of spores that'll quickly overwhelm.



TANK
'Pure' Flood can scurry around in various forms, the most dangerous being this brawler.



ABOVE: Anachronistically, Elites will join the ODSTs in fending off the flood.

LEFT: For a brick, he flies pretty good.





ABOVE: Something about this guy I just don't trust.

RIGHT: Winter is already here, it seems.



REALM OF THRONES

Turn *Bannerlord* into A Song of Ice and Fire. *By Christopher Livingston*

LEFT: I probably won't offer to marry anyone in this crew.

BELOW: The map is, quite simply, massive. And this is just part of it.

It's been a while since I've stuck my nose into anything related to Game of Thrones. I think I just lost interest, which is what happens when you spend years invested in a bunch of books and then more years invested in a TV show, and then you get an abrupt and disappointing end to it all.

But just because something ends badly doesn't mean you can't – eventually, after a long enough grace period – dive back in and enjoy all the stuff you liked before it came grinding to an unsatisfying halt. And so when I saw a full conversion mod for *Mount & Blade II: Bannerlord* called *Realm of Thrones*, which turns the world of Calradia into Westeros and Essos and populates it with characters and locations from Game of Thrones, I decided to give it a try and see if I could still enjoy the characters and fiction I spent so much time with years ago.

WINTER IS COMING

The mod has been in the works for a while, and like *Bannerlord* itself, it's now in an Early Access state: not

NEED TO KNOW

RELEASE
Mar 30, 2020

DEVELOPER
TaleWorlds Entertainment

PUBLISHER
In-house

LINK
taleworlds.com

finished, but plenty to play with. Along with the map of Westeros and a considerable part of Essos, there are hundreds of NPCs from Game of Thrones, the major cities and families from the books and show, dozens of towns and villages, and yes, even packs of white walkers patrolling

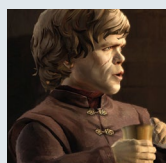
THERE ARE HUNDREDS OF NPCs FROM GAME OF THRONES

north of the Wall. That's where I start playing, at Castle Black with a new character named Skip Happyfish (the last name comes from his banner, which is a smiling fish, and his first name comes from what I do to dialogue in sprawling RPGs). And then I quickly get to work, doing what I always do in the various Game of Thrones mods I've played over the years: I look for famous people and try to marry them.

That's sort of the problem with a world full of fantasy celebrities like Daenerys Targaryen, Cersei Lannister, Ned Stark, Jon Snow, and plenty more besides. I put the medieval warfare and quests of *Bannerlord* on hold and turn the game into my own version of *Pokémon*. I can't catch most of the famous characters of Game of Thrones, but I do want to meet them all and invite as many as I can to join Clan Happyfish. I have no time for anyone else: no B-list characters, like

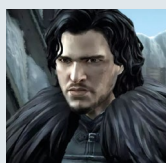
TAKE A SEAT

Who should sit on the Iron Throne? Here's how we're voting



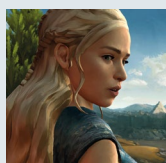
TYRION?

Nah. He's smart and fair but considering his messed-up family, it's still hard to trust him.



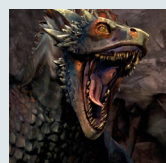
JON SNOW?

Bah! The dude is such a sulking bore, the entire kingdom would be down in the dumps.



DAENERYS?

She definitely put in the work, but it's time to elect a leader, not just follow a bloodline.



A DRAGON!

It'll keep everyone in line. No one would dare invade. And it would look great on a banner.

the Karstarks or Freys, and definitely no randomly generated characters that aren't from the books or the show at all. I immediately begin scouring the mod for the most famous people I can find.

It doesn't take long. Right there in Castle Black I run into Sandor Clegane. He's not as huge as I expected, but I invite him to join my small clan, which is currently so small it consists only of me. I don't find anyone else of note in the castle, apart from a guy named Charles Foulbreath (unsurprisingly, he was not in the books) and Commander Jeor Mormont, who is far too important to go running around in the snow with me. But I at least take the time to introduce myself. Speaking of snow, I don't see the eternally sulking Jon Snow anywhere so I take the Hound and leave.

We are immediately attacked by looters, the weakest and yet most common enemies in *Bannerlord*. There's only about a dozen of them, and I figure Clegane can take on at least ten at once while I kill the other two. Wrong on both counts! Sandor goes down almost immediately despite the looters basically just having rocks as weapons. I join him a moment later face-down in the snow, and we're dragged around in chains for a while before I manage to escape.

HAPPY LANDINGS

I head down to Winterfell where I meet Theon Greyjoy, who is probably just hanging out there innocently and not planning to betray anyone. I hire a few lowly mercenaries to ride with me and run into a woman named Scabby Sansa, who I assume is not the Sansa we know from the fiction. More looters accost us after we leave, but this time I'm victorious, and so begins the familiar practice of winning fights, taking prisoners, and selling them and their gear to make a bit of bank. Over at the Dreadfort I meet Ramsay Snow, who hasn't been made a Bolton yet, apparently, but already seems on his way to becoming an evil scumbag.

Growing impatient in the cold north, I ride for the place everyone in Westeros really wants to go: King's Landing. It looks great in the mod, too, and in the tavern I find my first real Game of Thrones A-lister: Tyrion Lannister. I add him to my slowly growing clan. He seems like the kind of guy you could put in charge of just about anything, but for now it's nice

to just have him hanging out with me. We take a few small jobs here and there, and while guarding a caravan we run into some raiders, but once again my growing little band comes out on top. Then, just because I'm on a roll, I raid a village in the north, killing and capturing a bunch of villagers and making a whole lot of people, including the Starks and the Boltons, extremely angry at me. Luckily, I'm able to outride Robb's warparty and decide it's getting a bit too hot to stick around, though I make a quick detour back to Castle Black to pick up Sandor again, who managed to escape from the looters who captured us earlier.

I flee to Essos, the less-popular continent, and there I find my memory a bit fuzzy when it comes to places like Pentos. Did stuff happen there? Important stuff? Or am I thinking of Bravos? I really can't recall – it's been years since I read the books and after the final season of the show I think I blocked out a lot of it. Joanna Swyft, Boros Blount... these names seem familiar to me but when I meet them I draw a blank on who they are and what they did.

DRAGON LADY

Whatever. I know why I'm really in Essos, and it's to track down Daenerys, who is way the hell over in Mereen. The scale of the *Realm of Thrones* map really comes into focus as we ride and ride, and ride some

more, for days, just to even get close to Mereen. Finally, I stroll into the throne room and meet the Mother of Dragons, though she does not seem to have her famous pets yet. I try to marry her but all my gold, animals and weapons don't add up to enough in the trade window to even make a dent in her opinion of me. I can't even join her because I'm at war with the North over that village I raided,



I DON'T SEE THE ETERNALLY SULKING JON SNOW ANYWHERE

so I settle for helping her out with a quest to deliver some horses, and put Sandor and Tyrion in charge of a caravan to make some money.

With not much else to do in Essos other than pine for Daenerys, I head back to Westeros. I sell almost everything I've collected from raids and looters and prisoner sales to give a heck of a lot of gold to the North so I can make our little war go away, then figure it's time to really get into trouble. I ride north of the Wall with my 30 or so followers, and into wildling and wight territory. The wildlings aren't particularly friendly – I can't get into Craster's camp, and everyone else will only speak to me from atop their castle walls rather than letting me in.

WIGHT WEDDING

And then we run into some actual wights patrolling the snowy woods. There are... a lot of them. They're pretty well-spoken for the undead, but rather than trying to negotiate I decide to challenge them to combat. While my clan puts up a good fight and we kill about half the wights, what's left are more than enough to wipe us out. All my progress, gone, Clan Happyfish destroyed. It's back to square one, as I'm once again dragged around the country in chains, this time by undead ghouls.

On the plus side, I did get to see a lot of both Westeros and Essos, and met just about everyone I wanted to. The mod, even in Early Access, is absolutely playable as it is now, and the map is massive. Any Game of Thrones fans should find a lot here to enjoy. Just stay south of the Wall, at least until your warband is bigger than Clan Happyfish. ■

MODS OF WAR

Game of Thrones mods for other games



GAME OF THRONES

Crusader Kings II and the *Game of Thrones* mod. There's really no better combination.



A CLASH OF KINGS

Mount & Blade: Warband has its own *Game of Thrones* mod: *A Clash of Kings*. And it's excellent.



CIVILIZATION VI: A CIV OF ICE AND FIRE

The Night King and his White Walkers meet Sid Meier.



SEVEN KINGDOMS: TOTAL WAR

You can replace Attila with Tywin in *Seven Kingdoms: Total War*.



FAR LEFT: Daenerys is here, though I don't see any dragons.

LEFT: Hard to imagine a more valuable companion than Tyrion.



BELOW: Unlike the Lannisters, I prefer not to pay my debts.





BEAT THE TOUGHEST ENEMIES IN ELDEN RING

The secrets to overcoming the worst horrors of the Lands Between. *By Sean Martin*

NEED TO KNOW

DIFFICULTY
Hard

TIME
40 hours

VITAL LINKS

Best Ashes of War:
bit.ly/3wFmP32

Boss tips:
bit.ly/36RQ0tE

Top weapons:
bit.ly/3qJiPLb



HORSEPLAY

1 The Lands Between is filled with horse-riding foes, but did you know you can parry them off their mounts for a ground stab? You can even do this to the Night's Cavalry bosses, though they will try to re-summon their spectral steeds if you don't keep them occupied.



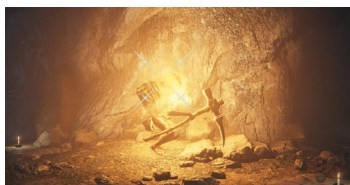
MARGIT GUD

2 Looking to make Margit a little easier? Visit the annoying Patches in Murkwater Cave and purchase his shackle. This item lets you restrain Margit multiple times throughout the fight, and you can even use it on Morgott later. Two for one can't hurt.



POISON OVERLOAD

3 You've most likely encountered Land Squirts in *Elden Ring*'s watery areas, bloated sacs that spew poison into the air. It may seem counter-intuitive, but if you poison them in return, they'll instantly die in an explosion of toxic gas, and can even kill others nearby.



MINER ASSAULT

4 Speaking of blowing things up, did you know that miners who carry backpacks of glowing rocks explode if you hit them with fire? Throw a bomb or loose a fire arrow at the pack and it'll detonate, dealing damage to nearby enemies. Much better than bouncing swords off them.



GROUNDLED

5 There's nothing more annoying than a bird with knives strapped to it. You can ground flying foes with gravity skills, such as Ash of War: Gravitas that you get from the Onyx Lord on the beach south-east of where you start.



BEASTS BEGONE

6 Tired of fighting rats and giant dogs? The isolated merchant near the start of Dragonbarrow sells a torch that keeps bestial enemies at bay. I wouldn't advise trying it in Farum Azula, though.



FIRE IN THE HOLE

7 Another pesky enemy that can be one-shotted is the Flame Chariot. Kite one to a climbable structure and then jump off and attack. You'll stick your weapon straight into the vent on top of its head, causing it to blow up. But run away before you're caught in the explosion.

GODDESS OF ROT *Defeating Malenia, the hardest boss in Elden Ring*



1

BLOODHOUND'S STEP

To dodge Malenia's waterfowl dance, the Bloodhound's Step skill is vital, letting you jump through it as she comes at you. It's a reward for beating the Night's Cavalry boss in Dragonbarrow.

2

KNOCK HER DOWN

Malenia is susceptible to stunlock, but can also be knocked to the ground with sorceries, charged attacks and skills from weapons like the Giant Crusher, the Prelate's Inferno Crozier, or Radahn's Starscourge Greatswords.

3

ICE AND BLOOD

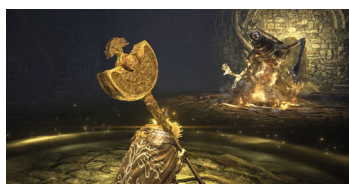
Even though Malenia heals when she hits you, Bleed and Frost help chop down her health. Use status spells like Swarm of Flies in her second phase, when she's recovering from Scarlet Bloom.



CRACKING CRYSTALIANS

8

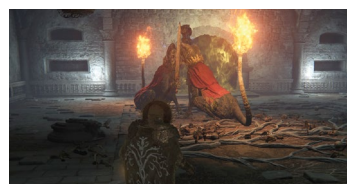
Deep in the mines of the Lands Between you'll encounter a race of sentient crystal statues that are resistant to damage. If you use physical incantations like Bestial Sling and jump attacks, you'll quickly crack them and weaken their resistance.



HEAL WITH IT

9

It's no understatement to say that Royal Revenants are the toughest enemy to deal with in *Elden Ring* – they teleport, spit poison and are both fast and aggressive. However, area of effect healing spells damage and stagger them, simplifying a tough fight.



DOG EAT DOG

10

Erdtree Burial Watchdogs are nightmare fuel, and in both the Minor Erdtree Catacombs and the Giant-Conquering Hero's Grave you'll face multiple. But hit one with four Crystal Darts, and you'll 'reprogram' it to turn on its allies instead.



TREACHEROUS TROOPS

11

Commander O'Neill is an incredibly tough boss, but Niall is even worse, summoning soldiers and zapping you with his lightning leg. If you use a Bewitching Branch to turn his own troops against him, it'll make that first boss phase much easier.



BLOOD LETTING

12

Mohg, Lord of Blood is as atmospheric as bosses come, but his curse of blood is hard to handle. Beat Eleonora in the Altus Plateau as part of Yura's questline, and you'll gain a Physick Tear that removes the curse entirely.



DIARY

PERSONAL ADVENTURES IN GAMES



TWO WEEKS BEHIND ENEMY LINES IN

METAL GEAR SOLID V: THE PHANTOM PAIN

What I learned about Soviet Army discipline and the importance of showering. *By Samantha Greer*

This is a debrief report from Flaming Buffalo (I arrived late to codename assignment), from reconnaissance in the Soviet Army controlled region of Afghanistan. I was given two weeks to navigate and gather as much intel as possible on the USSR presence ahead of Big Boss' arrival. He's a busy guy, you know – it's not like he can be in two places at once, after all.

I was inserted by helicopter at 1800 hours near Spugmay Keep at the region's southernmost point, with the intent of navigating the entire outer edge. On foot I made my way to the nearest small guard post, where I planted myself up on a ridge with a view from above. I spent a whole day watching this meagre camp to glean what I could about their operation and let me tell you, these Soviet soldiers are a disciplined bunch. They barely sleep, barely chat, and certainly don't take breaks. As the one and only sandstorm of my two week excursion rolled in they barely flinched. If we find out they're all robots, I wouldn't be surprised.

Heading north I came to a larger settlement called Da Shago Kallai with a dozen or so soldiers, though something that I would come to learn is quite standard across their occupation is the use of decoys. I planted myself this time in an abandoned house at the edge of town, which was useful for its close proximity and great view, but also because it made it a bit easier to rest and pass the time.

From here I made a log of the trucks coming and going. Or single truck, with the same one seeming to go on rotation with a few neighbouring settlements, returning roughly every four hours. I couldn't identify any hierarchy here. There were specialist roles like radio operators, but no officers or leadership visibly apparent.

I spent over a day observing this place and noticed a few shift changes, with two guards getting sleep at a time. Eventually, at no discernible prompting, they decided to expand the perimeter of their patrols to include the outskirts, where my building was. On the afternoon of my third day a guard decided to use this as his vantage, and forced me to stealthily climb down the back of the building to find a position on a ridge nearby.

I waited until nightfall before moving on, evading trucks and searchlights to head out into the dunes for a resupply before heading on to Lamar Khaate Palace. It occurred to me how little the region resembles the mountainous Afghanistan, home to rains and snows, I'd been told about. In fact, it sure looks a lot like Jordan, a country almost 3,000 kilometres away. Perhaps the Soviets terraformed it, like how Big Boss encountered that Russian jungle years ago.

The palace is one of the few places that does resemble somewhere in Afghanistan, looking a lot like the Darul Aman Palace. It turned out to be defended by a skeleton crew bolstered by decoys and numerous mines. A truck

IT'S ABOUT DAY FIVE WHEN I START LISTENING TO CASSETTE TAPES

came and went, stopping for less than an hour on each trip north or south. Do these soldiers have any orders besides defending these arbitrary spots?

WORDS AND DEEDS

It's about day five when I start listening to cassette tapes to help pass the time while I observe, in the absence of any life in the world or any dialogue from the soldiers. The only time I've heard these soldiers speak so far was to urge some goats to clear the road, an admittedly rare sign of activity.

The most surprising, or maybe alarming, thing I came to realise was that there were no Afghan people – civilians, resistance fighters, or otherwise. It seemed absurd that there wouldn't be a single one present, especially given their resistance is one of the only things the Soviet soldiers stationed here spoke about. In fact, you'd be forgiven for thinking the Soviet Army invaded Afghanistan simply so they could stand around and wait for Big Boss to show up.

After a day of observing the palace I moved on, heading north to reach the Wakh Sind Barracks. While weaving through a small canyon I stumble across a bear.

Despite the threat the creature poses, it's honestly pleasing to see a living thing out in the world. I watched it for longer than is probably reasonable given my mission. Thankfully, I didn't get mauled to death.

Arriving south of the barracks, it was immediately apparent this is the most well-defended place I've encountered. Nestled on a steep slope, the place can only be entered from the front and is heavily fortified with high barricades and several emplacements where sentries scan with searchlights. There were still only a dozen guards present but the dense outpost makes those numbers count. With so little of the interior visible from outside, I decided I had to find a way inside if I was going to gather useful intelligence. Before I could get that far, though, a

THE RULES

1. Two (in-game) weeks to gather intel on most Soviet Outposts.

2. Try and find as many high-ranking officers as possible.

3. Only observe. The Soviet Army can never know I was there.



Can Diamond Dogs look up?

» searchlight exposed me for a split second. Enough time for a guard to be convinced he saw something and call for someone to come check it out. I didn't hang around, and quickly reached a crack in the rock face, which I climbed to get inside the barracks.

Soldiers were speaking! An honest to god conversation! Something about Reagan and the futility of nuclear war. A sign of life in these automatons all the same. I crossed over the gateway to a high-up dugout that seemed disused and set up for a day of observation.

At dusk, perhaps due to me spooking them the night before, they had sentries posted above the gateway which certainly made my exfiltration trickier. I was halfway across the gateway when someone thought they saw me. Pushing on, I hugged the edge of the cliff and could do nothing but hold my breath as the soldier approached, torch in one hand, scanning the bushes. He came to stand just a few feet away.

If I had a tranq gun and no restrictions, this would be a nothing moment and he'd be unconscious already – but for my mission, this was as good as dead. I figured this was it, I'd blown the whole thing. There was no way he wouldn't spot me. I even got ready to draw my rifle. Then, impossibly, he failed to see me, and assumed he must have imagined it. Turning, he headed back to his post like an enemy spy hadn't been two steps away from him. Phew!

ESCAPE FROM NEW FOLK

Eh... I hesitated to add this to my report, but after my escape I noticed I was being pestered by flies – a sign my odour from a week in the field had grown quite strong. Sadly, a dip in the nearest river didn't wash me well enough to get rid of them, so I was stuck listening to their buzzing. Facing certain death or torture is one thing, but these flies, boss? Nothing in my training prepared me for them and their incessant noise. They're the USSR's greatest asset, a weapon to surpass Metal Gear. Ahem, once Metal Gear is invented, I mean. What year is it?

The supply depot to the north is surprisingly light on defences and vulnerable from the back, where I posted myself on a ridge that views the whole site. I'm not sure what supplies are kept here, since trucks never seemed to stop on their way through. I watched for a day and like

VOIGHT-KAMPFF TEST

If Soviets are real, where are these activities?



PETTING ANIMALS

You telling me a human wouldn't befriend those donkeys?



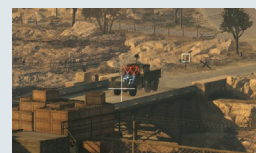
TAKE A LEAK

I'm serious! Follow them for hours, they never need to go.



CHAT

They only ever seem to have conversations when I'm in earshot... curious.



GOOFING OFF

These guys drive around for days without ever resting. That's not human.

every place before it, nothing unexpected happens. The Soviet Army is a well-oiled machine, its soldiers following an endless, unchanging routine. It feels... inhuman.

I moved on under darkness to Central Base Camp, supposedly the largest presence the Soviet Army has in the region. What I found was skeletal: the bones of a massive base occupied by a handful of soldiers stretched too thin to adequately defend it. It looked formidable from the outside, but I infiltrated it quite easily. Half the hangars are ruins. There were no tanks or armoured vehicles of any kind. Again, I failed to find officers.

I saw what seemed like some kind of briefing among soldiers, but nobody seemed to be in charge. Who is running this place? There's a sense that their forces are simply locked in a futile effort, dwarfed by the vast landscape around them, in no way up to the task. They're little more than cannon fodder for Big Boss.

The look of a woman whose comrades won't forget her codename is Flaming Buffalo.



TOP: Someone taking their lunch on this hangar roof is one of my favourite little details.

ABOVE: They'll never be able to find me while I'm hiding two inches below a wall.



I'D GROWN COMFORTABLE AND STOPPED BEING AS CAUTIOUS, LIKE A FOOL

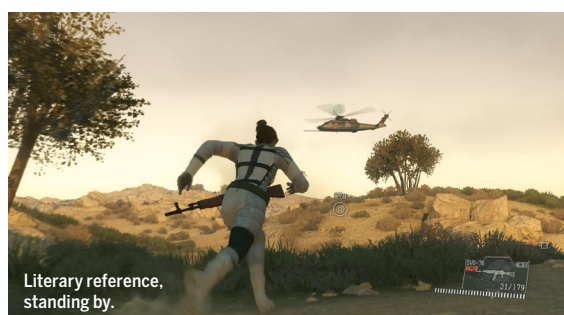
After a close call with a patrol, I got out of there and started the long march south, now worried I wasn't going to make the rendezvous on the 14th day. Thankfully the remaining sites I had to visit were easily observed and poorly defended. Things seemed to be going smoothly until I stumbled into a minefield. I'd grown too comfortable and stopped being as cautious, like a fool! I detonated one of the explosives by accident and injured my hand, but worst of all, put the entire area on high alert. I hope they thought it was a wild animal that set it off. None of the other outposts I passed afterwards seemed to be awaiting attack. I *think* I got away with it...

Heading south again I found a single soldier patrolling alone out in the middle of nowhere. Mostly the soldiers

stuck to their designated posts, so this was well outside the norm. Why was he here? And why on his own? I stalked them for a little while, matching my footsteps to theirs just a few paces behind until I could finally make my way around them, undetected.

On the 11th day I arrived back at Spugmay Keep. I hadn't anticipated being early, and made a brief scouting hike to the town to the north, which was as poorly defended and unremarkable as the others. When the helicopter arrived at dawn, I climbed aboard without hesitation, but started to feel a little wistful as the landscape rolled away beneath me.

Not for my two weeks in this place, but for what I thought it might be when I first saw it years ago: a bustling, complex beast full of life and the unexpected. Instead it's a lifeless rock, populated by robots that pose about as much threat to the boss as shrapnel to his face. He's going to have no trouble here. Hell, I think he's going to have to make his own fun to get any kind of challenge or tension out of the place. Now, if you'll excuse me, I really need that shower. Flaming Buffalo, out. ■



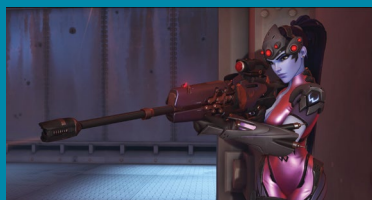


WHY I LOVE

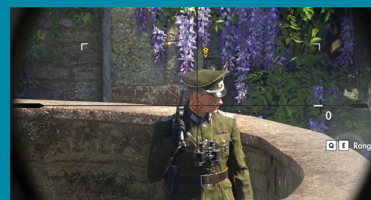
WHAT MAKES GAMES SPECIAL

SNIPING

Why does something so bad feel so good? *By Imogen Mellor*



RIGHT: A sight for sore eyes.



Overwatch is a 'dead game' to many but I still play a lot. When I'm sitting with friends in Discord shooting the shit, I also like to shoot shit, and *Overwatch* is my preferred place to do that. I've played hundreds of hours of Blizzard's shooter, and for the last three or four years my favourite hero to main has been Widowmaker. And it's had a terrible knock-on effect in other games.

Sniping as a sexy french lady is, to me, the pièce de résistance of gunplay. There is nothing that sets off a small explosion of serotonin in my brain like getting a clean headshot on someone. The elegance. The ease of it all. It's the most competitive I get, to be honest, knowing that I killed someone even before they realised what was going on. Pure, shimmering, golden bliss.

I know Widowmaker's abilities through and through. Quick scoping isn't that great unless your enemy is really low. You should instead scope, wait for your gun to power up, and shoot at 100% power. I know this timing innately. It's second nature and frankly hard to unlearn for other games these days.

It can feel a little mean at times. When you've spent as many hours as I have in *Overwatch*, you cultivate such a good game sense that you can predict pretty basic player movements. I'm no god at the game, and I haven't even got a rank as I never put any real effort into the competitive mode. But I can at least pull off deliberately falling off a ledge for a Reaper to follow me down, before zipping back up and

NEED TO KNOW

RELEASE
May 24, 2016

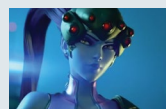
DEVELOPER
Blizzard Entertainment

PUBLISHER
In-house

LINK
playoverwatch.com

SNIPING'S ELITE

The best in the biz



WIDOWMAKER
Overwatch's femme fatale is a French ballerina with a sad history. After being kidnapped by the evil Talon and brainwashed, she murdered her own husband before returning to Talon.



CHAMBER
Valorant's sniping specialist is also French. There must be something in the wine. His ultimate ability Tour De Force gives him a very expensive, high powered sniper rifle. Ooh la la.



KARL FAIRBURNE
Karl Fairburne is an American sniper in the *Sniper Elite* series. If you've ever wondered what James Bond might be like as a Yank, he's your guy. He uses his rifle to foil the plans of evil Nazis.

headshotting them – a bad manners bamboozle. If it's so wrong, then why does it feel so bloomin' good?

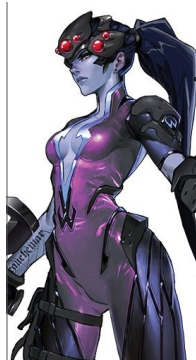
SHOOT TO KILL

My theory of why I love sniping is that it's because I'm an archer in real life. As a sport, archery is all about taking one shot at a time. You train yourself to make every arrow count. There are entire mental exercises you do when competing that have the

IT'S SECOND NATURE, AND FRANKLY HARD TO UNLEARN FOR OTHER GAMES

sole intention of calming yourself. I think that training seeped into the way I treat guns in games.

The satisfaction I feel when sniping isn't just found in *Overwatch* either, it carries through to other titles. Every time I pick up something new, whatever class gives me the most power per bullet is what I'll gravitate towards. If you can give me a gun and a good distance, that's where I'll happily sit. Does it always go well? No. I'm playing a lot of *Valorant* at the moment and the



Operator sniper rifle, though a one shot kill, is seriously disrupted by any player movement. So I don't land 100% of my shots – but when I do, oh baby, there's nothing quite like it.

SMOOTH OPERATOR

Apex Legends has guns that give me the chills too. Even before I find a trusty Longbow DMR or a Sentinel, I'm picking up that light purple ammo scattered about. Shoguns? Eh. SMGs? Nah. Up close and personal fights are a nightmare, but hey, I'll just avoid them the best I can, sit on this tower, and wait for a butt-sliding pedestrian. It helps that *Apex Legends* gives me extra teammates, so they can do the dirty work while I twiddle my thumbs at the top of a building.

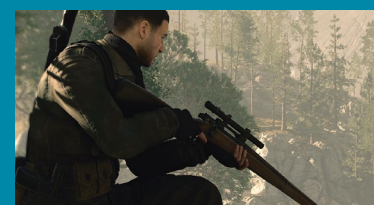
I've also dipped into the *Sniper Elite* games, and frolicking about the continent of Europe with a massive gun on my back feels strangely like a holiday. Picking off Nazis one by one surrounded by fragrant lavender fields, is a delicious treat. And additional mechanics like bullet drop add nuance that keeps the experience feeling tactical even in single-player.

There are some who find sniping as a whole, cheesy. Sometimes it can feel oppressive and unescapable. If you're up against a good sniper, no matter the game, your breath can get sharp as you die. You start huffing and puffing about how you didn't get a chance to respond as a respawn timer slowly ticks. And that's a downside, because it's often such fun at the other end of the scope.

The point of sniping, for me, isn't exactly to win the game. I don't have an intense desire to conquer everything I play. A match loss, unless it's caused by unquantifiably stupid teammates, is fine. GGs all round, I had a good time. Really I just enjoy the weightless moment as something as simple as a single pull of muscle in a finger devastates some pixels on my monitor. It's pure. It's effortless. It's so much fun. Sniping is just the best. ■



LEFT: It's the eye of the spider, it's the thrill of the fight.





LEFT: Look at all those little guys! Adorable.

ABOVE: This is what peak graphical performance looks like. Or what it looked like in 2007, at least.

RIGHT: The setting is a thousand year conflict dubbed The Infinite War. Take that, Warhammer 40K.

SUPREME COMMANDER

The demanding RTS runs well on modern machines. *By Luke Winkie*

There is no high quite like the emasculated agony of graphics envy. It was 2007, I was 16 years old, and still fully bound to the limitations of the Xbox 360 and PS3 in the bedroom. The hand-me-down laptop whirring on the desk could barely handle *Battlefield 1942*, much less the relentless tempo of speedy processors dutifully obsoleting the seventh generation of home consoles. Still, I voraciously tore through the games press, reading up on the mouthwatering vistas that were enthusiastically unavailable on a Dualshock, essentially as a way to torture myself. The primary object of my obsession? *Supreme Commander*.

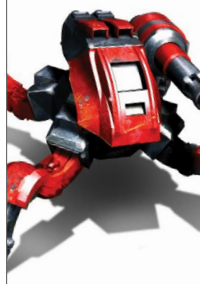
Gas Powered Games' watershed RTS arrived with exactly one selling point;

this thing was a beast, and you should be jealous if you couldn't run it. And so, I binged the 360p E3 preview footage of *Supreme Commander* on my sad, dinky laptop, which seemed to wheeze and gag at the mere sight of all of the quicksilver troops swarming over the skirmish fields. So close, and yet so far.

It sounds strange now, but there was a time in the mid-2000s where every GPU benchmark was set by the latest round of RTSes – much in the same way that Sony shows off new Playstation tech with rain-slicked Lamborghinis in a sumptuous *Gran Turismo* suite. If you grew up almost exclusively on consoles like I did, you became accustomed to this beautiful heartache when the PC class laps whatever third-party ports emanating from the family TV. 2007 was the apex of the cycle. Here I was stuck with, like, *Mercenaries 2* while the

adults in the room ran circles around us with the finely modelled tools of destruction deployed by Crytek and Relic. As I soaked up those titanium-plated mechs and supersonic bombing runs of the gorgeous *Supreme Commander* dystopia, I made a private pact that should be familiar to the many other young men reading this story. Someday, I too will dump a ton of my hard-earned income into a top-tier gaming rig, and then I'll never be left in the dust ever again.

It goes without saying that the Alienware Aurora below my desk is more than capable of running *Supreme Commander* in 2022. This machine just chewed through *Elden Ring*, *Battlefield 2042*, and *Forza Horizon 5* without a hitch; I put my money where my mouth was. There is something darkly satisfying about returning to a videogame that was once a GPU showcase after much time has passed – much in the same way a crosstown rival relishes the



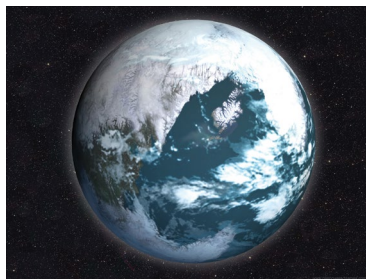
NEED TO KNOW

RELEASE
February 20, 2007

PUBLISHER
THQ

DEVELOPER
Gas Powered Games

LINK
bit.ly/3vfgWbJ



chance to get their revenge on a formerly great sports team. *Supreme Commander* creaks out of my Steam library with none of the expected orthodoxies of the last 15 years. The resolution sputtered to fit the aspect ratio of a widescreen monitor, any stray alt-tabbing was guaranteed to lead to a lock-up, and I actually needed to slow down my mouse cursor speed to molasses levels in order to cut down on the 120fps whiplash. At last, after the humiliation of my Xboxified youth, revenge was finally mine. But at what cost?

BLOWING OFF THE DUST

Gamers have rarely asked for much from a graphical standpoint beyond their aesthetics. Simply watching *Supreme Commander* run was half the appeal in its heyday, so I was not surprised that the campaign offered me a few paragraphs of sparse flavour text before dumping me into the barren grasslands crucial to the RTS experience. The missiles are supposed to do the heavy lifting, right? So, a few power generators and mass extractors later, the war machine was up and running, and I was ready to make good on a derelict

THE RESOLUTION SPUTTERED TO FIT THE ASPECT RATIO OF A WIDESCREEN MONITOR

promise I made with my teenage self. But reader, just look at what time hath wrought. The starchy textures of the earth stretched out in every direction, featureless and bland, almost *Cruelty Squad*-like in its disorienting uniformity. The tank-shaped blobs that steadily pumped out of my munitions factory looked better, but not by much. They encircled the rival base and peppered it with raw, pixelated smoke and fire. It would've been right at home on the App Store, advertised in the bleakest corners of the web.

How can that decay happen so quickly? *Supreme Commander* hasn't even celebrated its 20th anniversary, and yet its prime attribute has been absolutely obliterated by the PC power curve. A chill ran up my spine as I realised that this fate has probably befallen all of its peers; after all, it's been a while since I've seen *Crysis* up close, too.

Maybe this is a fitting fate. I have a faint memory of RTS diehards

THE BEST GAMES YOU CAN'T RUN

A brief timeline of all the games we upgraded our PCs for



DOOM 1993

Yes, *Doom* was a beast long before we were running it on iPhones.



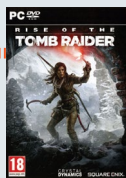
DAIKATANA 2000

If only the specs matched up with the gameplay.



CRYSIS 2007

Some say even the beefiest machines still shudder at the sight of that jungle.



RISE OF THE TOMB RAIDER 2015

Were the ponytail physics worth it?



» dismissing *Supreme Commander* while it was still at the peak of its influence, complaining that the game was more sizzle than steak compared to its deeper, but considerably uglier peers. (After all, *Company of Heroes* came out a year before.) I would never claim to be an expert of the genre, but after surviving the temporal horror of the boot-up, where it becomes excruciatingly clear that we're all deteriorating right alongside the video games we used to play, I can say for certain that Gas Powered Games got a bad rap. The studio was clearly in love with their tech, and

gave the player ample opportunity to fill the screen with as many troops as possible. It's a philosophy that produced a gaucheness that likely turned off some of the traditionalists. My favourite quirk? Anyone can send an engineer into a blazing firefight where it can happily plop down a fresh manufacturing operation totally divorced from any adjacent resources or supply lines. Are you being victimised by bombing raids? No problem, just encircle yourself with a battalion of flak cannons anywhere on the map. These are the sort of firefights dreamt up by the most perverted

ABOVE: The game was a spiritual successor to *Total Annihilation*.

Warhammer sickos; an endless tide of shocktroopers born into battle and living five-second lives.

STEP ON THE GAS

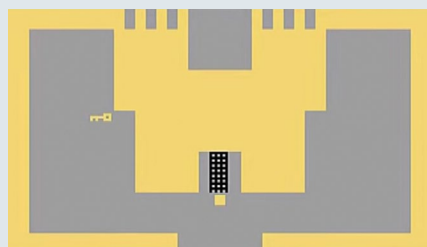
So yes, *Supreme Commander* is a little bit silly, but only as a way to summon up the primal joys of real-time strategy. If *Mortal Kombat* is a grotesque celebration of 100-hit combos and old-school arcade depravity, then this studio wished to celebrate the full-scale pyrotechnic throwdowns that define our favourite tactical successes. I never really loved managing an economy in the first place, and slamming up against the

CUTTING EDGE To think that these games once represented the apex of graphical fidelity



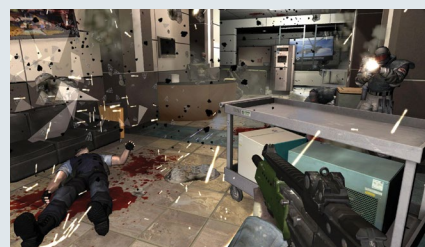
VIRTUA FIGHTER

Four, maybe even five polygons of action!



ADVENTURE

Say what you will, but that castle texture is still great.



FEAR

Never tell anyone under 20 that this used to scare you.



ABOVE: Maybe that's just what ground looks like after a thousand years of warfare.

RIGHT: The sheer scale is still pretty cool to behold.



guardrails as I was trying to produce a legion of Mutalisks in various harebrained *StarCraft* schemes. Gas Powered Games was entirely disinterested in beating around the bush, and instead allowed players to prioritise whatever warfighters they want so long as the energy ratio is pointing up. Perhaps that's why there's still a small, dedicated *Supreme Commander* community crashing into each other on the desiccated servers. I became absolutely terrified to play them the deeper I got into the campaigns. There are so many bizarre strategic curveballs in this game, and that has undoubtedly consolidated into an abstruse meta that would leave me pantless and sobbing against even the most casual opponents. You really can build anything, which means you need to be scared of everything.

CAMPAIGN TRIP

That was fine with me though, because it's been years – maybe even decades! – since I sat down with an old-fashioned RTS solo story. You know what I'm talking about; disembodied voices hovering over NPC megabases, a foreboding mission timer in the corner of the HUD counting down to a game-

YOU CAN BUILD ANYTHING, WHICH MEANS YOU NEED TO BE SCARED OF EVERYTHING

losing assault, the developers desperately squeezing any potential varietal out of what will always be a fairly straightforward premise. (Destroy the enemies halfway around the map. Leave no survivors. Prepare for a crippling counterattack.) It all took me back to a happier place. In one level I was supposed to use an air transport to hoist a crucial unit over some distant mountains that bracketed the map into two theatres. First though, I needed to rout the mobile anti-air cannons patrolling the no-man's land. Out came the tanks, blasting through the heavy steel, avenging all of my doomed pilots. That's the sweet spot for me: an RTS objective that doubles as a weird, rock-paper-scissors logic puzzle. If it's been a while since you've indulged in that erstwhile gaming pleasure, then I highly suggest coming home to *Supreme Commander*.

Honestly, that was my primary takeaway from the game, as it slowly



morphed from an artefact of GPU lore to, well, an ordinary piece of outmoded software. This industry is cruel to its ancestors, especially those that once annihilated the motherboards of yore. In fact, I'd reckon that most people's relationship with *Supreme Commander* was one of inaccessibility – a faint idea of wondrous gaming superiority, something to flaunt over the plebs. All of that macho posturing has gracefully evaporated, leaving behind a very good RTS with a lot of neat systems, coming off more like an underdog indie project rather than the harbinger for a new era of PC engineering. In 2022 *Supreme Commander* is ugly, janky, and hopelessly out of step with modernity, but at least the giant robots explode in a nuclear fireball when they're killed. It was awe-inspiring in 2007, and now comes off kind of quaint – videogames in its primal adolescent period. Surely it is only a matter of time before another high-budget opus laps whatever I've got simmering under the hood, provoking a stressful search for a few extra gigs of RAM. That trick will keep working on me forever, and I'm all the happier for it. ■

MORGAN PARK



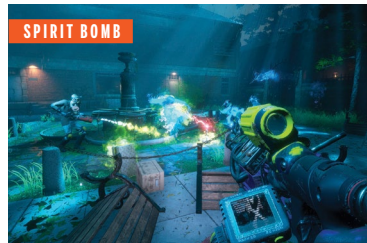
You know me for my multiplayer shooter takes, but there's more to me than that. I'm a man of depth, and I like conquering walls and snow just as much as blasting online rubes.



TEARDOWN

teardowngame.com

→ One of the few indie games that I can't stop coming back to. Now that its campaign is complete and its modding scene is thriving, it has become one of the most inventive and fun quasi-puzzle games around. You'll be hooked the first time you sledgehammer a wall.



MIDNIGHT GHOST HUNT

midnightghosthunt.com

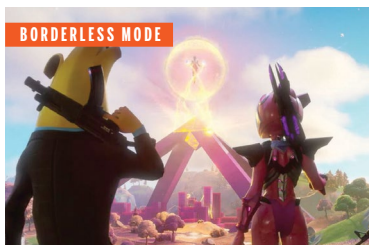
→ This is what happens when the prop hunt genre reaches its natural conclusion: a 4v4 asymmetrical showdown between kitted-out ghostbusters and ghosts with a ton of tricks up their sleeves. Ghosts can also fight back with the props, and that's just cool.



SNOWRUNNER

bit.ly/3MfadE6

→ This is the other game that creeps back into my life every few months. Its goals rarely diverge from 'deliver materials to a place', but the challenge of tearing through mud, snow, and water in *Snowrunner*'s maps never gets old. The perfect game for truck lovers.



FORTNITE

epicgames.com/fortnite/en-US/home

→ Who knew that *Fortnite* could get so much better if you just drop all the building nonsense? With Zero Build mode, I'm finally having fun in a game whose rapid tower building used to intimidate me. You can also mantle and sprint now, both of which feel surprisingly good.

MUST



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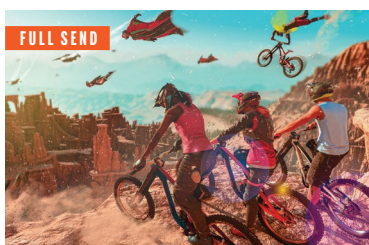
by Morgan Park



HITMAN VR

hitman.com/global

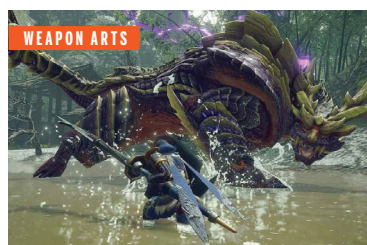
→ As VR games go, *Hitman VR* is kind of a mess, but it's also one of my favourite games on the platform. Seeing every mission from the latest trilogy rendered in a headset is an absolute treat and *Hitman*'s mechanics are surprisingly perfect for the slow pace of VR.



RIDERS REPUBLIC

bit.ly/3xzTcAw

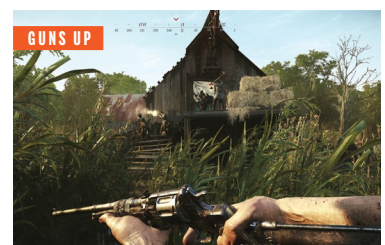
→ *Riders Republic* somehow throws a bunch of action sports into a single open world map and makes them all fun. That's it, that's all the game is, and it rules. Bikes, snowboarding, jetpacking, and skiing with buds in a ridiculously pretty sports paradise makes for a great game.



MONSTER HUNTER RISE

monsterhunter.com/rise

→ The PC version suffers graphically from being a port of a Switch game, but you forget about that quick once the hunt begins. *Rise* is everything that's great about *Monster Hunter* with fewer annoying quirks. It's also perfect for co-op. And you can ride a giant dog into battle!



HUNT: SHOWDOWN

huntshowdown.com

→ This is my competitive FPS of choice at the moment. Not only is its 'extraction royale' format a welcome salve for the frustrating randomness of battle royale, but its unique arsenal of late-1800s guns produces some of the best, most intense firefights I've ever had in a videogame.



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